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AUTHOR Copeland, William C.; Iversen, Iver A.
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ABSTRACT

A shrinkage of one-half or more in available federal funds designated for human services is expected to occur in the next five years. Despite this outlook, federal funds are available for increases in human services, provided that such services are organized into related systems of services and are planned and managed as such. This essay on budgeting in human services, using fiscal incentives to restructure programs and operations, can be of use to program planners and financial and budget people. "Designed in" cost control is the chief end of the measures described. The essay first indicates how disincentives to reform result from current budgeting and programming practices, and then shows how reform can be advanced and, in time, achieved through the combined use of two approaches: maximizing of federal funding, which provides funds for "buying reform" in the states; and program restructuring, in which the program is constructed on systems-oriented lines as a continuum of care. The two approaches accommodate both program preferences (such as normalization) and fiscal preferences (such as long-term minimum total cost for operating a normalized system). The purpose of the essay, however, is program reform in the states, not the maximizing of federal funds. To this end, maximizing is only a means, a set of techniques that the states can use to achieve parity with the federal government in program funding. (KC)

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Interagency Net Budgeting and Others Fiscal Incentives

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William C. Copeland
Iver A. Iversen

PROJECT SHARE

A National Clearinghouse for Improving the Management of Human Services

CE 030 196

PROJECT SHARE has contracted for the preparation of a monograph series in order to survey the state of the knowledge or the state of the literature in selected subject areas of importance to the human services community. The monograph series provides an opportunity for authors to offer their views and opinions on these topics. It is the aim of Project SHARE to stimulate discussion through the publication of these monographs.

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Preface

This essay on budgeting in human services is addressed primarily to program people, for budgeting is what program people must do as the money begins to run out. At the same time, the approach outlined here — the use of fiscal incentives to restructure program design and operation — will be of use to financial and budget people. "Designed-in" cost control, rather than broad, across-the-board cutbacks (so often the budget person's only expedient), is the chief end of the measures described. Indeed, program restructuring is the essential principle that financial and budget people must adopt as a budgeting technique in the times ahead. Only when the two approaches advocated later on — maximization of Federal funds and program restructuring — are treated together can there be any hope of significant program reform.

Is it, in fact, likely that the money will run out? The portents seem clear enough. For the past several decades, there has been a prodigious growth in the money available for human services. By any index — proportion of gross national product, the number of persons employed in human services, relative proportions of Federal, State, and local budgets — the increases in money committed to health, education, labor, and social services have been enormous. But this age of openhanded funding seems to be passing. Education and labor already are feeling the pinch. Health and social services programs and income maintenance can expect to feel it soon.

On sober reflection, this dwindling of funds was probably inevitable. For the last decade, the United States has been a low-growth society, both in terms of real increases and in per capita domestic product; this condition will persist for at least another half decade, perhaps longer.

Until now, the Nation financed large social programs partly by cutting defense spending and partly through inflation. Inflation has reached the point of being politically intolerable, and the pendulum on defense spending is moving toward increased expenditures in that sector. As a result, the Federal Government is considering Draconian cuts in social services and public health, placing a ceiling on medicaid, abolishing job programs, and severely curtailing food stamps.

This course will continue, and it is not realistic to expect substantial increases for social services currently planned, financed, and managed on a fragmentary basis. In fact, a shrinkage of one-half or more in available funds designated for social services can be expected to occur over the next 5 years.

Despite this outlook, Federal funds are available for increases in human services, provided that such services are organized into related *systems* of services and are planned and managed as such. In the next decade, the primary problem facing social services is that of making use of available funds by packaging *total sets* of services — in accordance with strategies of program development and organizational restructuring that do not ignore funds from income maintenance, health, housing, and food and nutrition programs. If this is done, there is good reason to expect a minimization of losses in actual services.

The intention of the authors is first to indicate how disincentives to reform result from current budgeting and programming practices and then to show how reform can be advanced and, in time, achieved through the combined use of two approaches:

- *Maximization of Federal funding,* which provides funds for what we term "buying reform" in the States; and
- *Program restructuring,* in which the program is constructed on "systems-oriented" lines — and, to borrow a term most commonly used with reference to long-term care — as a *continuum* of care.

The two approaches accomodate both program preferences (such as normalization) and fiscal preferences (such as long-term minimum total cost for operating a normalized system).

That the approaches recommended are not without their critics should be acknowledged at the outset. A number of techniques presented in these pages are deplored as immoral by a number of persons in human services. Some within the Federal Government tend to view the techniques for maximizing Federal funds as strategies for "ripping off" the Federal Government. Others, at the State level, tend to regard the same techniques as methods of "raiding" one unit of State government for the benefit of another.

However, such objections may reflect more a reaction to the term "maximization" than a denunciation of the techniques themselves. They do not alter the fact that:

- Individual Federal programs, no matter how broadly defined, have within their scope specific aims;
- The Federal Government has offered financial inducements to the States for implementing these aims, and
- The States are entitled to the Federal share of the costs they have incurred in accepting that offer.

Nor do they alter the fact that each level of government, whether Federal, State, or local, should be entitled to view its revenues as a total investment portfolio and attempt to maximize the return — in terms of the outcomes of its human service programs *and*, in the case of joint investments, its collections from the other levels of government for their agreed-upon shares.

And they do not alter the fact that if a financing program exists for a socially desirable purpose, it should be used for that purpose, and used according to the terms defined in law and regulation. If the program is open ended, it is because it is intended to serve a level of need. If vaguely defined, it is because it is intended to accommodate innovation. These views do violence to neither the letter nor the intent of the law.

If a Federal funding program is viewed as an intergovernmental game (in the game-theoretic sense in which there are winners and losers), each participant is entitled to a strategy. That of the Federal Government, for at least the past 15 years, has been one of "minimization." Every State can recount instances in which the Federal Government has been the reluctant investor, and many of them can recount at least one instance in which the Federal Government actually reneged. The States need a counterstrategy, a "maximization" strategy. We describe a number of techniques intended to make the game a fair one.

If, on the other hand, both players adopt pure strategies, again in the game-theoretic sense (in which each attempts *only* to maximize inflow or minimize outflow), both will continue to make unwise decisions. The critics will be right — except that the real rip-off victims will be those who otherwise would have benefited from program reform.

The purpose of this essay is program reform in the States, not Federal funds maximization. To this end, maximization is only a means. It is basically a set of techniques that the States can use to achieve parity with the Federal Government in program funding. It might be the only means available to the States for financing major program reform.

I. Background of Human Services Budgeting: Why Rational Planning and Implementation Are So Difficult

Increasing program fragmentation, lack of coordination, and lack of flexibility in dealing with the needs of the whole person and of multiproblem groups have been discussed for years. Much of the rhetoric of senior officials at Federal, State, and local levels is concerned with these problems. A great deal of staff time and many studies, special committees, organizational changes, and executive orders are devoted to solving the problems. Yet nothing works. Why?

The answer can be found in the nature of bureaucratic organization and budgeting. Three key factors are at work:

1. The basic bureaucratic and organizational disincentives to coordination among the human services organizations.
2. The Federal domination of State-local human services programming and budgeting.
3. The basic character of administrative arrangements.

Bureaucratic and Organizational Disincentives to Coordination

First, it must be recognized that some clarification is in order. The traditional German General Staff organizational design that characterizes many large businesses and virtually all governmental organizations implies a model of reality that may be inaccurate. The major assumptions are that the organization produces a single product rather than a mix of products; that the product is relatively unchanging; that the relationship between tasks and final product is known and a clear division of labor can be made; that there are clear lines of authority and an ordered budget structure; that the need or market for the product is relatively unchanging; and that, as a consequence, all employees have clearly understood duties which, if performed faithfully, will insure the organization's survival in the marketplace.

The conditions of this organizational design model are sometimes satisfied. A number of successful modern organizations — military, business, and governmental — are built on such a model. However, the conditions exist together for only a time (e.g., the Ford Motor Company from the late 1910's to the early 1930's), simply because one or more of the conditions change. Organizations develop a mix of products, market conditions change (or, in the case of human service organizations, the needs of clients change), or the technology changes.

When conditions are no longer met, the organization becomes dysfunctional. New products or new kinds of services — and a new organizational model for producing them — are necessary. New task groupings and new motivators of managerial and employee performance are required. Producers in the more dynamic industries (microprocessor manufacturing, for example) attempt a project or matrix approach to organizational design.

What is important to understand about organizational changes is that they are often — when well implemented — really changes only in organizational incentives. In an industrial adaptation of the German General Staff model, if I am loyal to my unit and produce according to instructions, the result — achieved through the basic design — will be the most efficient production and distribution. If I do what I am programmed to do, the organization will be successful, and I will be rewarded. Deviation from my instructions, or an attachment to a cause other than the one that commands my first allegiance, is a violation of organizational design and its rules. In a public human services adaptation, if I confine myself to my designated function, attempting no innovation, I can count on steady job progress and continue firmly entrenched in the growing human services industry. If I attempt innovation and fail, I will have violated the underlying rules of the organizational design, thus abrading the sensibilities of my coworkers and possibly slowing my advancement in the organization.

Countless observers have noted that the behavior ordained by that model is counterproductive in a dynamic society. The model's organizational rules of behavior are observable in the budgeting behavior in industry (as veterans of budget allocation struggles between research, engineering, production, and marketing departments can testify) and throughout government. Each corporate unit has its own budget, which it is prepared to defend. In the budget process, each unit does so in isolation from all other units. In government, the situation in the line agencies is exacerbated by the fact that each unit may have its own budget examiner operating in relative isolation from the budget examiners of other units. Separate legislative committees have responsibility for authorizations or appropriations for the various units, each in isolation from the others. The only unifying force is the constraint of total available revenues. (The process and its effects are detailed clearly in Aaron Wildavsky's 1974 and 1977 works on public budgeting.)

The segmentation of organizational units and their budgetary processes, with all incentives concentrated on loyalties to individual units and budgets — long characteristic of many business organizations — exists in all human services organizations. It is further reinforced by the pattern of Federal funding for human services, which tends to dominate the budgeting processes of State and local governments and perpetuate dysfunctional organizations.

Federal Domination of State-Local Human Services Budgeting

The Federal Government dominates State and local human services budgeting in a number of ways:

- By the sheer size of its human services budget (which by any measure is massive).
- By setting the rules that govern program design, program operation, and claims for Federal reimbursement.
- By using States and localities as the operative surrogates for federally generated programs.
- By dominating most discussions of human service programs.

As a result, most human service activities at the State and local levels must be conducted with one eye always on the Federal budget and the laws and regulations of the Federal Government. This tends to be true even in areas where the Federal Government supplies less than the majority of funds.

The Federal Government has retained the prerogatives of setting program policy and conditions for Federal funding, but it has delegated to the States all of the responsibilities for implementation. The States must select the proper program configurations, access the right Federal accounts, maintain program standards, attend to client eligibility matters, oversee the cost accounting, and prepare and submit to the Federal Government claims for reimbursement. Mistakes at any point of the process can result in deferred claims, disallowed claims, or penalties in the form of reduced Federal matching, even for entire programs.

The Title XX Example

An example of this dominance can be found in title XX. States tend to fear Federal audits, so much so that even the mild reminder of the possibility of audits sometimes leads to irrational decisions. The recent history of title XX is a case in point. States spending well above their title XX ceilings appeared to be audit-proof. However, some of those spending well under their ceilings were monitored almost continuously, their claims examined closely and often deferred or disallowed. The latter learned to audit-proof their programs through the simple expedient of including other, previously State-supported, services in their title XX plans so that they, too, were spending above their title XX ceilings. The net effect has been twofold:

1. While the Federal matching rate is 75 percent for services within the ceiling, it is zero for all other (i.e., the audit-proofing) services. The effective title XX matching rate, the ratio of Federal reimbursement to total title XX cost is now less than 75 percent. In many States, it has fallen well below 50 percent.
2. Defining a service to be a title XX service precludes the option of considering it a candidate for other Federal funding sources.

The Federal strategy is clearly one of minimizing Federal Financial Participation (FFP) in its funding programs.

The Federal Budgeting Process and Its Effect on State Implementation

All Federal programs originate with the legislative branch, that is, the Congress. The Congress works through the committee system, and particular problems or functions of government are assigned to particular committees. Human services, however, are not so easily manageable. They tend to be multifaceted and will not stay within the committee system. Therefore, more than one committee becomes interested in and initiates human services legislation. For example, income maintenance programs were originally the province of the tax and revenue committees (Ways and Means and Finance). However, since income maintenance funds were to come from *new* forms of taxation (i.e., the Social Security Trust Fund), various kinds of income transfer programs are now also provided through legislation originating in energy, housing, and agriculture committees.

There is no requirement that new human services programs be dovetailed with existing programs. In fact, the politics behind a new program at times may require that, insofar as possible, the new program have nothing whatsoever to do with any existing program. No one human services legislative committee has authority over any other; needs are perceived, programs emerge, and in law each new program differs in some respects from others.

As a program becomes law, it becomes the administrative responsibility and property of an agency in the executive branch of the Government. The agency will have the responsibility for making the program "administrable." Three major factors will affect the eventual design of the new program when it reaches the client, how it operates, and, most especially, how it is walled off from all other programs:

- The structure of the funding stream,
- Its required administrative arrangements, and
- Whether the program is open ended.

The Structure of the Financing Stream: The Actors

In the funding of human services, whether primary or nonprimary, there are five key actors:

1. Federal agency,
2. Single State agency (including its sub-State regional or area offices),

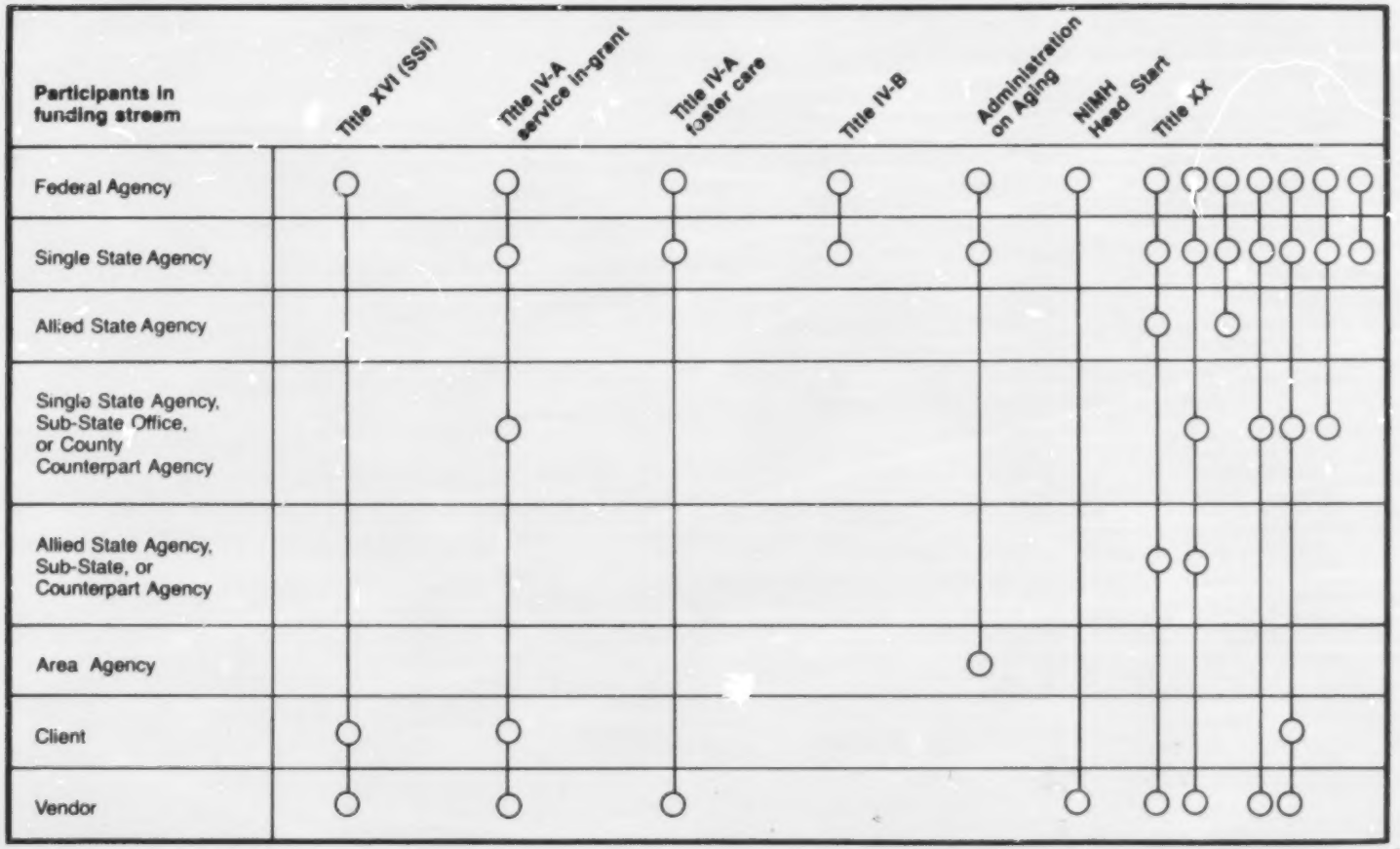
3. County agency or the State's local district office,
4. Public and private vendors, and
5. Consumers.

The Flow of Funds Between Actors

Money can flow directly from the Federal agency to the consumer so the vendor of services can be paid (e.g., supplemental security income (SSI) checks for the mentally retarded in special domiciles). It can flow from the Federal agency to the single State agency where it supports staff (e.g., title IV-B funds in some States, and certain types of capacity-building and planning funds from the National Institute of Mental Health (NIMH), the Administration on Aging, and the Administration for Developmental Disabilities). Or it can flow from the Federal agency directly to public and private service vendors (e.g., NIMH grants for Head Start programs).

However, aside from the social security income-maintenance accounts, the major flow of money is from the Federal agency through State agencies, and then to the client or vendor (or, in New York, Ohio, California, Minnesota, and other county-oriented States, from State to county to client or vendor). Additional links in the chain are created when there are contracts with other public providers who contract with still others (often the case with title XX services), or clients purchase services and are reimbursed by the agency (section 228.49 of the title XX regulations). There are also umbrella organizations (for example, the Head Start program and the various day care consortiums for administering title XX contracts). Financing a title XX service might thus involve the Office of the Assistant Secretary for Human Development Services (AS/HDS), a State department of public welfare, and a county department of public welfare (which contracts with the county department of juvenile services, which in turn contracts with a group home, the final vendor). A similar chain can occur in title IV-A, in which the money flows from the Social Security Administration to the State public welfare agency, to the county welfare agency, and ultimately to the client, who then purchases day care, chore services, or other service. (Figure 1 graphically represents the flow of funds in a number of Federal funding programs.)

Figure 1
Some Examples of Funding Stream Paths in Human Services



A circle indicates that a given actor is involved in initiating, passing through, or finally receiving the funding.

The Relationship Between the Actors at the Federal Level

There is little actor interaction at the program level in Federal Government. Except at the secretarial level of the Department of Health and Human Services and the Office of Management and Budget, where different programs are occasionally considered together for reasons of budgeting, there are few opportunities for examining or propagating interagency cooperation. In general, the budget's own boundaries set the limits of a given agency's attention. This is true at all levels of bureaucracy. The Department of Health and Human Services pays little attention to the operations of the Department of Agriculture. Within the Department of Health and Human Services, the Office of Human Development has only occasional interaction with its sister agency, the Social Security Administration. Within the Office of Human Development, the Administration on Children, Youth, and Families works little with the Administration on Developmental Disabilities.

Generally, those who manage individually budgeted programs in any given agency do not pay much attention to those who manage other programs, even in the same agency. This observation is qualified in only one respect: an agency will pay attention to another agency when there are a permanently programmed institution for doing so, and continuing political and budgetary stimuli to keep the institution active.

The Relationship of the Actors at the State Agency Level

The major social welfare financing streams are run through the department of public welfare, or its equivalent, in most States. These streams are principally titles IV-A, IV-B, IV-C, XVI, XIX, and XX of the Social Security Act and the Administration on Aging funding programs. Developmental disabilities (DD) and NIMH funds flow through a State department of mental hygiene and mental retardation. Vocational rehabilitation (VR) funds flow through a State vocational rehabilitation agency, which often is in the State's department of education or department of employment security and tends to function as an autonomous agency. Law Enforcement Assistance Administration funds flow through a State department of corrections, alcohol, drug abuse, and mental health administration, and other public health-component funds tend to flow through a State department of public health, as will medicaid (title XIX) funding at times.

Rarely does coordination exist among any of these departments except where it is programmed in, as in the case of medicaid relationships formed between State departments of health and welfare. Even these relationships tend to be troubled, if not laggard, in completing the coordinative tasks with which they are charged. For example, in a number of States, medicaid agreement actions required by the Federal Government and not opposed by any party have been put off as long as 5 years. Only at the point where a Governor's budgetary or administrative agency moved in and applied pressure were long-pending agreements signed.

This segmentation-by-budget effect operates not only among departments, but also within departments. Within departments, each separately budgeted human services function operates with relative autonomy.

Relationships Between Local Actors

It is at the local level that the final effects of all the budget-stream segmentations are felt, and it is here that management integration does or does not take place. In general, wherever the budget streams are different, no integration takes place. For example, State law may give responsibility for deinstitutionalized persons to the local public welfare department, but at the same time it may give the responsibility—and the funding—for community mental health, mental retardation, and alcohol and drug programs to community mental health and mental retardation (CMH/MR) boards. Funding for the public welfare departments at the local level will come from title XX, from State residential treatment and custodial financing programs, and from local tax revenues. Funding for the CMH/MR

board will come from separate lines of the State budget to pay for community services, from local tax or private matching funds attached to State grants, from NIMH grants, from medicaid (which pays for a number of services in the MH/MR environment that title XX pays for in the public welfare environment), and from patient fees. Title XX contracts with public welfare agencies may be an additional source of CMH/MR income.

The major funding for community services are State-local funds for the CMH/MR agency and title XX funds for the public welfare agency. The net effect is that each agency operates its own community service programs. They often serve the same population, or significantly overlapping populations, with little communication between them. The administrative requirements of the different funding streams are ample justification for their continued, separate existences.

The Character of the Administrative Arrangements

The basic character of the administrative requirements of Federal funding programs is set in legislation. Variations in the implicit audit requirements, for example, can be found in all legislative programs. (Compare title XX with title V in the Social Security Act, or title XX with the developmental disabilities legislation.) The language of the legislation is then interpreted into regulatory form, sometimes through an unyieldingly literal application of the legislation, sometimes through a decidedly agency-idiosyncratic, extended exegesis of the legislation.

The administrative arrangements themselves constitute a multidimensional array, exhaustive in their particularity, embodying at least the following requirements for directing the financing stream:

1. A State plan, different for each funding stream, and with different requirements for each funding stream;
2. Separate and dissimilar reporting requirements for each stream;
3. Extreme differences in audit requirements;
4. Different forms of reimbursement;
5. Separate State legislative and Governor's action requirements;
6. Different (but nonetheless overlapping) specifications of target populations;
7. Different client eligibility requirements, in terms of objective criteria such as age, income, assets, location, and clinical or categorical attributes;
8. Different specifications for the kind of agencies or organizations that may provide services; and
9. Different professional and/or credentialing preferences.

The very complexity of the administrative arrangements tends to wall off the use of one financing stream from another. This would not present any difficulty if people's problems exactly paralleled the problems for which the programs were designed. But this is not the case. The Federal approach to designing human services programs tends to be of a "categorical" nature. That is, the Federal program, as defined in its legislation, is targeted to a specific group, or "category," of problems or of persons with problems.

For example, the target population of vocational rehabilitation is all or nearly all the disabled, but the program itself is limited to those for whom success (in terms of a successful vocational outcome) can be predicted in advance. Those whose vocational prospects appear dim, although they may constitute the bulk of the seriously disabled, are ineligible for the program. The problem is further compounded by the criteria for evaluating the performance of the vocational rehabilitation agency. Only the number of successful closures, not program innovation or caseload difficulty, is taken into account. As a result, potential clients whose needs are great or whose rehabilitation would be a

particularly challenging undertaking for the counselor often have been turned away. (However, as a direct result of the Rehabilitation, Comprehensive Services, and Developmental Disabilities Amendments of 1978, such persons are now being served in greater numbers.)

Where the person in need of services has only a single problem or a limited set of problems, a single categorical program may suffice. For many, however, no one categorical program will solve all the problems that must be addressed together to bring these persons closer to the goal of economic and personal independence.

Medical assistance (with a number of qualifications) tends to be limited to persons with "medical problems" and used only for "medical treatment." Many persons who have medical problems also require income maintenance, education, training, rehabilitation, housing, and social support services. These needs, however, are not within the province of medical assistance even where they may be etiologically linked to, or may tend to exacerbate, the medical problems. Medical assistance, in effect, is walled off from all other problems.

The walling-off phenomenon is calculated to defeat efforts of executives at any one level of government to deal systematically with the programs under them. The day-to-day crises dealing with compliance requirements for procuring money tend to take precedence over other activities, effectively insulating the executives from any active form of program management.

A different form of insulation takes place at the agency level. At the State level, each agency (or budget program) will concentrate on its Federal connections at the regional level or at the central office. This vertically insular pattern of agency relationships across governmental levels continues down through the State agency's sub-State regional or local counterpart agencies. Each agency at each level will focus its attention on its connections at the next higher level. But an agency will do virtually nothing with agencies at its own level, which are also preoccupied with their own "money programs" and their own connections. This vertical integration of financing streams tends to put the real authority in a system in what would be described on formal organization charts as the "dotted line" relationship. Thus, authority of the general executive at each level of government is weakened.

At the Federal level, for example, the office of Assistant Secretary/Human Development Services (AS/HDS) has relatively little effective authority in coordinating, merging, reprogramming, rebudgeting, or otherwise influencing its children's, aging, DD, title XX, and other agencies. At the State level, the secretary of human services finds it very difficult to effect (or even affect) relationships between title XX, aging, medicaid, State institutions, CMH/MR, and alcohol and drug programs, because each of those programs must pay priority attention to the compliance factors embedded in that multidimensional array of administrative requirements administered by their respective counterparts at the Federal level.

As complex as these formal requirements are, there is also the formidable volume of interpretive memorandums (action memorandums, program interpretation questions, regional commissioners' letters, etc.) and an unwritten folklore of administrative rulemaking with which to contend. These also must find their way into the State-level law and rulemaking processes dealing with State and local implementation of Federal programs.

The Federal approach to program design, the parallel approach of State and local governments in organizing their programs and budgeting for them, and the consequent relationships that form vertically along funding streams instead of horizontally across agency lines all tend to make rational planning and programming for groups having multiple problems and needs a most difficult undertaking. The net effect is that, while the needs of the various multiproblem human services target groups have changed (or even if they have remained unchanged), no single program that really meets their needs has ever been designed.

The Unique Position of State Welfare Departments

The State welfare department frequently needs the capacity to channel streams of *its* money to other agencies. There are examples of other State agencies with accounts that are native to the agency but are also used in other State agencies through some form of interagency agreement. But these funds are usually a small part of most State human service operations.

The State welfare agency, however, has a need for multiagency uses of certain accounts, and the resultant interagency financing situation makes the welfare agency's fiscal and organizational problems unique. It must operate in a two-pronged mode: first as a provider of direct payments for income maintenance, vendor payments, and social services; and, second, as a contractor for such payments and services.

It also serves as the Federal Government's fiduciary agent for payments and services provided by other line agencies of the State government. This fiduciary relationship arises from the broad scope of application and open endedness of the welfare agency's basic financing mechanisms and from the particular mode of organization adopted by most States for their human services.

Effects of Scope and Open Endedness

If a list were made of all services provided or financed by all human services agencies of a State, virtually every one (with the exception of certain institutional services) would be found eligible, or potentially eligible, for payment through one of the welfare department's programs. On the Federal side, the programs are financed principally through the Social Security Act (titles IV-A, IV-B, IV-C, IV-D, XVI, XIX, and XX), with the State providing the varying rates of matching needed to capture the Federal dollars earmarked under each title.

There is great latitude in deciding what services and benefits will be provided for whom and under what conditions, and Federal law gives the States the responsibility for decisions in these areas. At the same time, funding of welfare programs is "superior" to that in other agencies in the sense that the net cost (to the State) for its programs is lower when federally matched funding is used than when State dollars alone are used. Incentives do exist, therefore, to cross agency lines, through interagency agreements, to fund programs for nonwelfare agency populations. All of the State's human service agencies will thus find that large groups of services can be financed out of the welfare agency for their own populations in agency-administered programs.

The Superiority of Welfare Department Funding

If there is any one characteristic that distinguishes types of Federal funding, it is the distinction between open-ended and closed-ended funding. Closed-ended funds must go through the annual appropriations process, with all its uncertainities concerning both the timing of the appropriation and the amount appropriated. Long-term planning with such funds is difficult and uncertain.

Open-ended funds, on the other hand, do not have an appropriations limit. For them, the Congress appropriates "such sums as are necessary." It also sets conditions on who is eligible, the kinds and amounts of benefits to be paid, or the amount of services to be provided. How much is spent depends on the number of persons seeking the benefits or services, their eligibility status, and their needs. The Federal Government (and State and local governments, when the program is intergovernmentally funded) is obligated to serve all eligible persons who apply. For this reason, such programs often are included in the group of expenditure amounts called "uncontrollable" by budget people.

Such accounts are not really uncontrollable. Congress and State legislatures (for the many State-option portions of the programs) can modify the conditions of eligibility, the type or level of benefits and services, or the amount of benefits or services *at any time* to control expenditures.

However, such controls at the Federal level can be effected only as part of the congressional authorization process, not the appropriations process. The accounts are uncontrollable only with respect to the appropriations process.

Some of the most significant human services programs are open ended. Most are included in the Social Security Act:

- Title IV-A (Aid to Families with Dependent Children — AFDC);
- Title IV-E (the new foster care program for dependent children)—open ended only temporarily, in a limited but important way;
- Title XVI (Supplemental Security Income for the Aged, Blind, and Disabled — SSI).
- Title XIX (Grants to States for Medical Assistance Programs, also known as Medicaid) — open ended for the moment, anyway. The Reagan administration's initiatives may change this.

Programs in the above group are open ended and are funded through the general revenues of the Federal Government. There is another group of programs included in the Social Security Act that are funded through social security trust funds. These include:

- Title II (Federal Old Age, Survivors, and Disability Insurance Benefits—OASDI, usually known as Social Security);
- Title XVIII (Health Insurance for the Aged and Disabled — Medicare).

In addition, there are two accounts that are not open ended in the appropriations process but have been treated politically as if they are:

- Section 8 (Rental assistance under the Housing and Urban Development Act);
- Food stamps (administered under the Food and Nutrition Service of the Department of Agriculture).

In general, these two accounts have been increased to meet demand in the 1970's. Whether this will continue is not known; however, unlike many other closed-ended funds, benefits from these accounts continue to be available as part of new program designs. Even under the administration's cost-cutting initiatives, such funding will remain available for many of the key groups for which State human service agencies have missions.

There is a last category of open-ended Federal accounts available. These are essentially off-budget accounts, which are counted as Federal appropriations because they are deductions from revenue. They have excited some recent interest in the Department of Health and Human Services as nonservice ways of aiding the poor. This is the least explored area of human service financing, but it is a potentially powerful contributor to such financing. Areas of interest here are:

- Negative income tax approaches (there is now an earned income tax credit for the working poor, which generates a payment from the Treasury for persons receiving less than $8,000 in earned income).
- Tax subsidies and tax forgiveness approaches in providing housing and employment for the poor.

The majority of open-ended programs are administered through the public welfare agency, which facilitates program "packaging." It will become clear in a later chapter how open-ended funds can be used to package total programs to provide funding for needed program expansion and for the transfer of State and local funds to other programs.

Cross-Agency Relationships: Definition, Pitfalls, and Promise

Both the opportunity and the incentive exist for interagency budgeting of programs. The organizational arrangements (that is, the formal organization, the budgeting process, and the appropriations process, which are, from the Federal point of view, needed to carry out the between-agency tasks of program administration) are left completely open and thus at the option of the State. There is a broad range of possibilities here. To understand the State's position in interagency budgeting, we should understand some of the needs.

The three needs listed above (formal organization, budgeting process, and appropriations process) are related. We can define a number of ideal types of organization, in which there are different approaches to each need. Two examples:

The traditional welfare department. This is a department in which there are absolutely no relationships with other (related) human service departments. There is no cross-agency contracting; the welfare agency's programs are only for its own populations. Its budget is developed separately from, and without attention to, the budgets of the other departments. The appropriations process considers the welfare agency's budget request in relation to only that agency's *own* perceived needs. This was the case with virtually all State welfare departments prior to 1965. Today, however, there are almost no traditional welfare departments left, at least in their purest form.

The fiduciary welfare department. Given the fragmentary opportunities for fiscal savings perceived by the States after the introduction of medicaid, a number of States introduced cross-agency agreements in which Federal dollars could be used to pay for services that had been exclusively State responsibilities. One of the earliest examples here is the 65-year-old (or older) patient of a State mental health institution who became eligible for medicaid in the late 1960's. The welfare department assumed fiscal responsibility for such patients, but the program responsibility remained vested with another State agency. A fiduciary relationship thus evolved.

The fiduciary concept spread during the next 15 years to a multiplicity of mental health, mental retardation, aging, child health, rehabilitation, and related programs. The dynamics of equal-level public organizations, however, sometimes pose serious problems in maintaining an effective fiduciary relationship — that is to say, each bureaucratic organization attempts to maximize its own autonomy. It does so by having its own budget for its own population of interest. It is willing to pay the political costs and the accountability costs of that budget, given the "benefit" of actually having decision control over that budget (contingent, of course, on budget office and legislative oversight).

Those parts of its budget that are not under the organization's control, and/or not for its own population, are unwanted, particularly if they add political and accountability costs without the offsetting decision-control benefits; they add bureaucratic costs without bureaucratic benefits. For example, a scandal in another agency's area that involves title XX and/or title XIX may thus become a welfare agency problem even though the welfare agency had no real control over the program. Again, when the entire medicaid budget is appropriated to the welfare agency's appropriation account to serve only as a conduit to large programs in the mental health and mental retardation agency, the welfare agency must take the political heat when there is a cost containment movement in the legislature and the medicaid budget is found to be too high.

Other agencies have little to gain from the appropriations process if it is a cross-budgeting process, in which title XX, title XIX, or other reimbursement is sought only as an afterthought (to reimburse the State's general fund after full-budget appropriations have been made), as is now the case in many States. Such States do not publish reimbursement results for each program anywhere in public budget documents. The other agency already has its money, a full-budget appropriation, and there is no formal budgetary or other relationship between the amount of the appropriation and efforts in maximizing reimbursements. As a result, the administration of Federal reimbursement claims in agencies contracting with the public welfare agency tends to be slovenly.

As a result of this "worst of all possible worlds" relationship between the welfare agency and its fiscally related allied agencies, there are no positive incentives to any agency to enter into a joint budget planning arrangement. There are, instead, large bureaucratic and political costs—and few, if any, benefits. As a result, once a fiduciary relationship is established, each agency will have the incentive to do only what is needed to avoid political, budgetary, and bureaucratic pain. Some practical results of this state of mind can be cited:

1. The medicaid bureaus of several States pay less than full costs to their mental health and mental retardation institutions because this "saves on medicaid." This transfers the balance of the costs to the institutional budgets, and the overall effect on the State budget is to raise the proportion of total expenditures paid by the State—thus lowering the proportion paid by the Federal Government.
2. A number of States have set Aid to Dependent Children-Foster Care (AFDC-FC) prices that are eligible for Federal participation at a rate lower than the full cost of foster care. This transfers the difference between the allowed payment and the full cost to another State agency or to the county agency administering the Foster Care program—again lowering the proportion of expenditures paid by the Federal Government.
3. A number of States have restricted eligibility for benefits under one or more open-ended Federal programs because this "reduces costs" for the administering agency—and thus reduces the appropriation that needs to be made to that agency, despite the fact that the appropriation includes both State and Federal costs of the open-ended programs. At the same time, the State budget is paying, in State dollars, for services to persons who have been denied eligibility because of this policy, using the appropriated funds of another agency. The net effect again is a lowering of the proportion of expenditures paid by the Federal Government.

Thus, the fiduciary relationship. What the incentives reduce to, for the welfare agency as the fiduciary for the Federal Government, is to protect against mismanagement and potential audit exceptions. Since preventive administration is often a difficult concept to sell to a legislature, the funding of needed accountability personnel becomes a painful problem for the welfare agency and one that the other agencies would like to ignore altogether. The "single State agency" concept places the accountability problem with the welfare agency; it must have the accountability personnel, whether it likes it or not, if it is to avoid management problems and audit exceptions in the future.

To summarize the characteristics of the situation that produces the fiduciary welfare department:

- Only unsystematic and sporadic pressures are applied by legislatures, Governors' offices, and budget offices to encourage State agencies to take advantage of cost-saving interagency opportunities. However, no systematic consideration is given across all human services agencies to the question of how to use the available instruments of Federal funds maximization to improve program administration and achieve full maximization.
- Budgeting is still predominantly single agency-oriented, with cross-agency agreements considered to be special cases.
- The budgeting and appropriation approaches are oriented to gross expenditures, with little or no attention to *net* costs, and with no application of rationally planned cost-savings criteria to individual accounts.
- Incentives for adequate administration are not provided to any of the agencies participating in cross-agency agreements.
- Federal accountability requirements, and thus unwelcome Federal attention to compliance problems, increase with each new interagency agreement.

The chief question that has been raised and examined in this opening chapter can be stated simply: What is there in the current Federal-State system that makes it so exceedingly difficult to provide "rationally organized and financed" human services? Some readers, confronting the prob-

lem in all its detail and magnitude, may feel deeply discouraged about the possibility of ever reforming the system and may even feel that reform is impossible. However, the remainder of this discussion is intended to show that reform is not only possible, but is actually much less difficult than human services professionals now believe.

II. Breaking Away From Fragmented Budgeting and Programming and Moving to Interagency Net Budgeting

In the face of the problems occasioned by the human services budgeting and programming process, a number of attempts at coordination and integration have been made—executive orders and grants encouraging coordination; legislative approaches such as the Allied Services Act, the Joint Funding Simplication Act, and block grants; and budget-decision approaches such as Program Planning and Budgeting System and Zero-Base Budgeting. They have worked not at all or not very well. The reason is that none of them takes very much notice of the incentives at work in service systems in general and human service systems in particular.

For some years, in working with State and local governments, we have noticed again and again that there are a number of key actors in the process of human services planning, financing, and implementation; that they each have different interests; and each can be brought to accept needed change, and even to sponsor it, if those interests are met in some way by the required change. Thus, the problem is to harmonize all interests in such a way that they will support—or at least not actively oppose—a change in the system.

In general, the answer is to find enough money to "buy reform"—that is, to "buy off" all the interests involved. From our own experience, it is clear that the Governor (who must simultaneously increase services and reduce taxes to make the magic that insures reelection) and all of the other actors can be reconciled to the reform of at least some portion of the human services system, if there is enough money to pay for reform. But, in a world of shrinking (or, at best, level) funding, this is an incomplete answer. What is needed is the paradoxical state of affairs in which:

1. There is enough money to buy reform; and
2. The reform saves money for *all* fiscal actors.

The conditions for this paradoxical but more satisfying answer are the subject of this chapter. To that end, we discuss:

- What a system is in human services, what systems funding is, and under what general conditions it can be developed as a basis for reform;
- The *underlying criterion* that gives us (the authors) a general sense of direction, and why such a criterion (even if not the one we suggest) is needed in the human services;
- The background of *continuum of care funding* (as an example of system funding), its advantages, and some definitions in the long-term care area; and what a second example of system funding, the child welfare system, looks like; and
- Finally, a basic organizational question for system funding.

System Funding: What It Is, Its Basic Conditions

Given the expected grim state of human services funding in the next 5 to 10 years, how can we at least minimize actual service losses? The disparity in the expected destiny of funding for "safety net"

programs (welfare programs and social security programs for income maintenance and health services) and social, education, labor, and public health service programs suggests there may be a limited, suboptimal strategy available in the human service area.

To the extent possible, the States can organize their labor, education, social services, and public health programs to draw upon the superior Federal financial resources of the health, income maintenance, food, and housing programs. This could provide real increases in funding for the programs and target groups that interest us. However, since funding for *all* human services can be expected to remain the same in terms of constant (undeflated) dollars or perhaps to decline slightly over the next decade, such a strategy would be useful only in the short term and only to a few programs at the expense of others. Indeed, it might result in a Hobbesian "war among friends" (e.g., family services advocates versus those who favor progress for the aged). More importantly, from our point of view, the adoption of this strategy would be a lost opportunity for doing far better and far more in reforming programs in a number of human services areas.

The described strategy has been known by a number of names — Federal funds maximization, intertitle transfers, redeployment, and fungibility. It has been a powerful program integration force in State governments, even where the ostensible goal has been only the capture of additional Federal dollars.

If that same strategy could be tied to a higher goal than simply maximizing funds, it would then become an instrumental strategy—one of the few that might actually break through the disincentives to reform that are built into the present system.

An alternative strategy to be followed — especially in hard times — is that suggested in economic theory:

- Where we can buy the same outcomes for less money (and we continue to prefer those outcomes over others), we should do so, or
- Where we can buy better outcomes for the same amount of money, or for less money, we should do so.

However, the advice of economists includes an especially hard doctrine — that somebody loses (not always, but often). As we know from our experience of budgetary allocation of public moneys, it is very difficult to make any form of public budgeting produce the selective and targeted decreases that the economist might recommend (e.g., the politically popular renal dialysis programs versus the more effective public health programs in preventive medicine). So long as our parliamentary democracy has no mechanism for the general weal to assert itself against the targeted special interest, this will probably make any easy application of the second alternative strategy impossible. [Note: Unfortunately, the basic budget rules for human services funding allocation at the Federal legislative level would appear to be: a) individual programs advance incrementally, but cutbacks occur across the board; b) when there are increases, the increases occur faster in open-ended than in closed-ended programs, regardless of the relative values of their outcomes; and c) health programs advance faster than all other human services programs and are never cut when they are open ended (but the current Federal proposals for a medicaid cap will partly "prove," i.e., test, this rule).]

The obvious question then arises: Is there any set of conditions in human services funding where we can combine the political rationality and attractiveness of the first strategy with the economic rationality of the second?

As it turns out, there is a whole set of important programs in human services that meets the conditions for matching up the two strategies. The conditions that define programs for which the two strategies may be melded are the following:

- There is a set of programs that relate to each other (implicitly or explicitly) because they serve persons whose crucial service-need characteristics are identical or similar (e.g., the aging, the mentally retarded, the mentally ill, or children in trouble).
- The program settings differ widely in intensity, physical context, and cost; but they are linked by heavier than expected traffic flows of the relatively homogeneous target group.
- Part of the program set produces
  a) similar or identical outcomes for a lower price than other parts of the program set, or
  b) recognizably different—and preferred—outcomes for about the same price as does the other part of the program set.
- There are multiple accounts involved in the funding of the program set, and some of the funding involves two or more levels of government (e.g., Federal-State or Federal-State-local).
- That part of the Federal funding for these programs that is "visible" to State and local government budget decisionmakers tends to support the more costly part of the program set better than the less costly part of the program set.
- One or more of the Federal funding streams is open ended.
- There is service and client-eligibility overlap among the parts of the program set.

One group of programs that can be shown to meet these conditions is known as "long-term care" programs. However, child welfare and other programs also meet these conditions.

In the generalized, abstract language of the 1950's and 1960's, the many fragmented programs used to meet the needs of a relatively homogeneous target group can be characterized as an *implicit system*. Sometimes, out of frustration, such implicit systems are called "nonsystems."

We use this language to indicate that, out of a definable population at risk (groups of people who have higher-than-average probability of entry into a system), persons who share some common (but fairly unusual) features generally meet a "gatekeeper" who holds the key to a publicly supported benefit. That gatekeeper (and there may be several different gatekeepers at several different portals) makes decisions on allowing (or sometimes forcing, as in the case of legal-commitment systems) the person to have some single or combined set of benefits or services.

Given the decision made, the person's condition, the benefits or services, and other factors, the person immediately either returns to the population at risk, receives the benefit and then returns, remains where he is for a time, or migrates to different (or a different level of) benefits or services.

To some degree (and especially when the system is implicit), the perception of what constitutes the system lies purely in the eye of the beholder. In general, however, we try to include in the system of interest any service or service location that has important cost or benefit implications for the target population being considered.

The benefits of the system and the administration of it all have costs. Depending upon the characteristics of the person entering the system, the following elements will have a given set of fiscal and social costs: where he enters the system; which portions of the system are rich and poor at the moment; what the formal rules of the system are; what the underlying culture, rules, and incentives of the system are; and how the system functions now. Our general analytic question is: How can we reduce the social costs of a human services system (e.g., make it more normalized) without increasing its fiscal costs and possibly while decreasing its fiscal costs?

Such implicit systems of care can be classified in a number of ways (it may be noted that, aside from HMO's, there are very few explicit systems in human services). Essentially, we can define two kinds by their "scalability." There are systems that can be scaled in some ordinal way, according to some organizational theme, some preference dimension, some social or fiscal rule (e.g., from most intensive to least intensive care, from least normalized to most normalized care, from most expensive

to least expensive care, from highest net cost to a financing jurisdiction to lowest net cost, from most dependence on the part of the consumer to the least dependence on his part), or some combination of these organizing motifs.

We are happiest, of course, when we find assemblages of scaled levels of service or locations of service that harmonize on all these motifs; that is, the dimensions all run in the same direction, from less desirable situations to more desirable ones. Otherwise, we can search for some actions or rules of conduct that allow us to make all themes of interest harmonize.

We usually call a system of care that is scalable in this way a "continuum of care." Much of the extended analysis and explanation in this paper concerns continuums of care — particularly the continuum of care for the mentally retarded and developmentally disabled.

Systems of care that are not representable on a single scale but instead resemble some form of branched network are usually called by the more general name of "systems of care." The child welfare system, although sometimes called a continuum of care, is really a system of care.

How do we move from implicit to explicit systems? And how do we apply reform principles? When we find a continuum, we first recognize that parts of that continuum cost more than others do for producing the same outcome, or sometimes cost even more than others while producing a worse outcome. Therefore, by reorganizing the flow of consumers/patients/clients, we can win better outcomes at the same cost, the same outcomes at some savings, or sometimes better outcomes at some savings. Some examples: alcoholism treatment, child welfare programs, mental health programs, mental retardation programs, aging programs, employment programs, and acute episodic health care programs. Each of these program areas carries its own featherbedding. If we can rid ourselves of it, we can expand the more economic services to more people, or we can put the savings into other services.

But can we make such changes at all? Every cost savings decision demands systemwide changes of the sort often thought to be impossible. Indeed, the scenery of applied organization theory and implementation theory — ranging from the early 1960's to today — is littered with wreckage of noble attempts to apply "good government" forms of rationality.

Such changes can be made and implemented, however, if two further conditions exist:

- The reorganization of the service system will return enough early savings to the active agency (generally the State government) to make it possible to buy off or neutralize all important interest groups on the State or local scene that might otherwise be opposed to the reorganization of the continuum.
- The long-term effect of the reorganization is savings to *all* relevant fiscal actors (i.e., Federal as well as State and local).

It appears that if the service system of interest meets all of the conditions cited earlier, it can meet these two conditions as well. A number of systems that we have investigated can indeed meet these conditions. This means that we are at a particularly favorable time in history to reorganize our many care systems in ways that make far more program sense, while actually increasing services in many areas.

The key instrument for getting such changes accepted and implemented, by triggering powerful reform coalitions, has a number of names, including Federal-money maximization, fungibility, intertitle transfers, and redeployment. There is a fifth name that is common for this instrument — "Federal rip-offs" (i.e., thefts from the Federal Government by the States). The name refers to the "pure" use of the techniques without any reference to program or administrative reform. It becomes simply a part of the "intergovernmental net budget minimization game," in which each level of government attempts to minimize its own net costs (i.e., the use of general revenue taxation receipts from the tax instruments used by that level of government) at the expense of other levels of government — or to maximize the contributions of competing levels of government.

Because of the common confusions here, the term "maximization" requires definition. From the perspective of a State government, the term means merely that the State seeks, for itself, for its human service programs, and for its citizens all of the entitlements available under existing Federal law and regulation. It does not mean shifting to the Federal Government any human services costs that are not the responsibility of the Federal Government. No mechanism exists for doing so, short of fraud or error, and the Federal Government employs a system of audits, quality controls, deferrals, disallowances, and penalties to insure that this does not happen.

The Federal strategy, in fact, is one of minimization. The Federal Government will reimburse a State only to the extent that the correct amount is claimed under the correct Federal or Federal-State funding program. It will not advise the State that an amount claimed incorrectly under one funding program can be correctly claimed under another. Nor will it advise the State, in the case of a claim correctly made, that a larger claim could have been made under another program. The Federal minimization strategy and a State maximization strategy are graphically displayed in figure 2.

Figure 2

Status of Human Services Claiming Strategies With Respect to Federal Financial Participation (FFP) Allowability and State Action in Claiming Under Any One Federal Funding Program

FFP Status	*State Action*	
	Not Claimed	**Claimed**
Not Allowable	Correct ◄———	Incorrect
Allowable	Incorrect - - - - ►	Correct

Solid Arrow: Federal Minimization Strategy
Dashed Arrow: State Maximization Strategy

No vertical movement is possible in figure 2 without change in either the Federal law governing the funding program or its enabling regulations. Therefore, since this paper deals only with what is possible under existing laws and regulations, the two arrows completely describe the intent of the two strategies.

Ideally, a State would claim reimbursement for the costs of its human service programs *if and only if* such costs were allowable. In other words, it would claim *all* of the reimbursements to which it was entitled, and it would claim *only* those requirements. This would eliminate any need for maximization and/or minimization strategies.

We will discuss these techniques in detail in this paper, both in their pure form and as instruments of program and administrative reform. The hope here is to communicate their usefulness and power as instruments of reform. While they are blunt instruments in many cases, we know of no other way to pave the way for large changes at the State and local levels — where all such program and administrative reforms must come under our intergovernmental system.

System Funding: The Underlying Criterion

The planning of services for any target group of interest is an empty exercise if it is not guided by an overall strategy. It is one of the ironies of the human services field that all of the funding programs that are passed in the hope that they will coordinate matters never come equipped with a strategy that tells the human services budget and program planners in what directions they should go and how to get there.

Considerable attention has been given to this matter in the human services field. For example, there is a powerful stream of thought and research in the human services evaluation area (first associated with Joseph Wholey, John Scanlon, and their associates at the Urban Institute; Wholey, 1979) that insists, commonsensically enough, that we cannot evaluate programs if we do not know what they are for. Nor can managers manage the programs if they do not know what they are for. Therefore, the experts insist that evaluability and manageability of programs are linked to each other and to a clear statement of purposes. Without such a clear statement, there is no evaluability or manageability. However, in the public sector, this "scientific rationality" runs into the basic "political rationality" that determines — when human services program designs pass through the hands of executive proposers and legislative disposers—that the passage of the program depends on blurring purpose. Thus, we most often attribute a variety of somewhat vague purposes or goals to the program, simply because that is the only way that a viable coalition for that particular legislation can be formed from the many potentially warring interests.

Recognizing that the basic political reality continues to exist, we nevertheless believe that an underlying criterion must be followed in public sector human programs, so that we have some basis for judging what our preferences are and what they should be. We expect no universal agreement with the criterion given below. However, after some 20 years of program work, research, teaching, consulting, and implementing small and large systems in State governments, such a criterion appears to work best as a guide for effecting change. At the same time, it is only fair to admit the basic source of direction that we use in human services investment matters. The criterion is: *Plan and implement services to minimize the public and private sector's long-term total (discounted) net costs of serving dependent populations while –at the same time –improving (or at least holding constant) system and program performance.*

Such a criterion assumes that:

a. We are not going to change a State's *general* priorities and levels of investment either for its dependent populations for which it accepts responsibility or for what it should do for them.

b. The States will be better off using "life-cycle costing" approaches to human services than 1-year or 2-year approaches. (Usually, only bizarre and ineffective decisions are made by acting on short-run criteria.)

c. We emphasize costs from the private sector as well as from the public sector—despite the rapid growth of public sector involvement in human services.

d. We emphasize total costs, because emphasis on only partial costs, as in the Supplementary Security Income-Vocational Rehabilitation (SSI-VR) and Disability Income Benefits-Vocational Rehabilitation (DIB-VR) programs, results in manifestly bizarre program decisions.

e. We emphasize *net costs* as well, so that both costs and benefits are considered in evaluating a policy. At the same time, given the behavioral questions involved, we emphasize net costs to each fiscal actor.

f. We emphasize discounting costs and benefits, because of the temporal effects on the final outcome of the calculation of net costs. (For example, heavy up-front investments in the early years of a policy, needed to secure large returns many years down the road, must be

adjusted to account for costs that were incurred in less-inflated dollars than were the benefits.)

g. We emphasize program performance and the investments needed to improve performance in the human services, because the key to long-term fiscal savings for *all* fiscal actors is improved systems and programs of human services and better, more normalized outcomes.

If such a criterion were used to guide overall policy, and if the criterion were taken seriously by legislatures in their appropriations planning and reporting requirements for executive agencies, there would be a number of changes in State policy.

For example, the choice of programs for the social and medical rehabilitation of AFDC families and of the physically and mentally handicapped would change. So also would the persons selected for rehabilitation.

The application of such a criterion in a thoroughgoing fashion, if it were accepted by all, might lead to choices of the following kind: Close down 25 percent of hospitals and hospital beds, and use the freed-up funds for freestanding diagnostic centers and surgical centers, for infant and early childhood stimulation programs, parent education programs, comprehensive programs for prevention of low-birth-weight births, teenage sex education and birth control programs, midlife educational retreading programs, and comprehensive group socialization, lifestyle, and health maintenance programs for the young aged. Or, restrict the growth of nursing home beds and use the freed-up funds for the development of nonmedically oriented group residents, in-home services, associated medical backup services. Or, use State mental retardation institution funds in activities of daily living training prior to transfer of the patient; then, transfer freed-up institutional funds into the support of community independent and semi-independent group-living programs for the developmentally disabled brought out of the institution.

An Example in Long-Term Care

Long-term care has been an area of interest in human services policy for generations, but it has been only during the past 15 years or so that this interest has elicited a consistent response at the national level. Prior to the early 1960's, the traditional view held that long-term care was primarily a matter of State or local concern. There was federally subsidized foster care for children, but no other manifestation of a national interest in long-term care.

The Long-Term Care System

The response of the State governments to the need for long-term care, while varying in scope and quality, had been remarkably consistent—State hospitals for the mentally ill, State schools for the retarded, State schools for the deaf and blind, but nothing for the aged except inappropriate institutionalization and State- (or locally) subsidized care in an ill-regulated network of nursing homes.

The turning point appears to have been the title XVIII and title XIX legislation, and the key item affecting long-term care in these legislative packages is the Federal subsidization of nursing home care. Both are primarily health care measures, and both are tailored to specific eligibility groups. Medicare, originally intended for the aged retiree, has since been expanded to cover the disabled former wage earner. Medicaid was, and still is, intended for medically indigent aged, blind, or disabled persons, or medically indigent families with dependent children—with some latitude given the States in defining medical indigency.

The basic response to long-term care reflected in medicare and medicaid has changed little over the years. The focus was and continues to be the nursing home. Coverage for long-term care in State

institutions, except for certain groups such as the mentally ill who are neither aged persons nor dependent children, was mainly effected by redefining such institutions to be Skilled Nursing Facilities (SNF's) or Intermediate Care Facilities (ICF's) More recently, for the mentally retarded, a special class of nursing home was created — the Intermediate Care Facilities For the Mentally Retarded (ICF/MR) — and State institutions caring for this group now are required to meet special regulations governing this type of facility.

Senate and House documents, HHS publications, and reports of HHS-sponsored R & D meetings leave the unmistakable impression that long-term care relates primarily to the aged and that, except for health-related day and in-home services, the vehicle for providing long-term care is the nursing home. It is true that the aged are the primary group of interest because of their number, and it is also true that nursing home care is a crucial (or, perhaps again because of their number, *the* crucial) element in a set of long-term care opportunities. But it is by no means true that the aged are the only group of interest, that a long-term care concept applicable to the aged can be readily extended to the other groups, or that the nursing home, to the exclusion of all others, is the preferred level of care for all aged persons in need of long-term care. Rather, the following must be considered:

There are other target groups. It should be noted, for example, that there are more than 300,000 mentally retarded and developmentally disabled persons, as well as more than 500,000 chronically mentally ill, in some form of long-term care. (It should be noted too that about one-third of these persons are also aged.) These numbers do not include the physically handicapped (those not classified as MR/DD or mentally ill) or the hundreds of thousands of children in some form of out-of-home care at any one point in time.

There are forms of care opportunities other than nursing homes – some more desirable and some less desirable. There are State institutions, specialized care residences (e.g., intermediate-care facilities for the mentally retarded), supervised (nonmedical) residences, specialized foster care, family subsidies, independent living, and a host of community-based and home-based support and emergency care programs. The development of these residential and generic service programs often has been haphazard, their linkage with one another fragmented, and their relative position in attracting financing a function of their length of time in existence and the degree to which they were perceived as meeting medical rather than other, more appropriate, criteria. The preferred approach would be to find some rational way of developing current and potential program and financing linkages between related types of care opportunities.

Health care is not the only form of support needed in long-term care. Chronic populations have needs for health care, but the episodic medical care that tends to be the concern of many of those who write regulations for government health programs falls far short of addressing the long-term care needs of these populations. The key needs for many of the aged, the mentally ill, and the mentally retarded and developmentally disabled tend to be multidimensional and multidisciplinary. Their needs span a broad range—medical services, nursing services (but not necessarily in a nursing home), psychological services, developmental programming services, income maintenance, transportation, day services, work activity services, and social rehabilitation services.

They have the further characteristic that – whatever their profile of needs – if one or more of these needs is not met, then the effect of any investment in meeting other needs tends to be attenuated. If there is not a flexible package of services that ranges over the whole spectrum of living supports, the people in long-term care tend to miss out on services that are needed and tend to receive services that are not needed. Under current financing programs, the services that are provided but not needed tend to be medical services — as inefficient, ineffective, expensive substitutes (provided in expensive care contexts) for the group of services usually called "psychosocial" services (which can usually be provided in less expensive care contexts). The problem in planning for long-term care, therefore, is to provide financing for all needed services and not just a few.

Planning for long-term care policy and legislation should involve all affected target groups, all needed care opportunities, and all necessary services. This will result in a more reasonable concept of long-term care—one that will permit addressing the legislative, administrative, programmatic, and fiscal issues in a more rational, cohesive, and manageable manner. Samuelson's *National Journal* article (Oct. 28, 1978) on the demography of aging, its effects on service needs and income maintenance, and the associated cost projections for the next 30 years provide convincing testimony that such changes are needed.

The General Continuum of Care Approach

We suggest the following approach to making the long-term care problem more manageable: *Organize legislation, management, financing (and financing incentives), and program development into continuums of care around homogeneous target groups – such as the aging, the physically handicapped, the mentally ill, the mentally retarded and developmentally disabled, and the child welfare populations. Each of these target groups then becomes a constituent part of the "long-term care initiative."* This approach has a number of advantages:

1. Instead of requiring legislation and administration covering all of long-term care at once, it calls for separate legislation for the separate target groups of interest. ("Massive" legislative changes tend to be almost impossible in the Congress as it is now constituted.)
2. It permits the Federal Government to deal simultaneously with a number of interest groups having relatively harmonious concerns. (Dealing with all mental retardation groups alone, for example, is possible. Dealing with *all* aging, *all* mental health, and *all* mental retardation groups at once is almost impossible.)
3. It forces Federal, State, and local governments into total program budgeting. This is important because no level of government knows its own costs or the total costs of any one system. The recent news that came out of our own project, that mental retardation and related problems cost about $10.8 billion per year in public funds, came as a surprise to DHHS Secretary Harris, who believed she had only one small $65 million per year MR/DD program. In California, for example, the "official" State budget lists MR as costing about $500 million per year in Federal and State funds. However, this sum represents only about one-third of the approximately $1.5 billion of the Federal, State, and local MR funding. Most of the remainder is concealed under other account rubrics, such as SSI, Supplementary Security Disability Income, State SSI supplement, medicaid, medicare, HUD and local housing authority budgets, title XX and its associated State budget, VR, State mental health, Public Law 94-142 (Assistance for Education of All Handicapped Children), and State and local education costs.
4. It forces States into a posture of integrated placement, case management, financing, and evaluation for each identified target group.
5. It helps to align Federal and State policy and program with the currently accepted principles of preference—i.e., least restrictive environment, most normalized appropriate placement, and least costly appropriate behavior on the part of State and local governments in program development and client placement. (Since current Federal financing policy tends to encourage law breaking by States — by funding institutions and nursing homes that are providing inappropriate care and refusing to fund appropriate community services because they are "social" and not "medical" in nature — the continuum-of-care approach also clarifies where the problems are and how to fix them.)
6. In the intermediate to long term, a continuum-of-care policy will save all actors money. In the short term, it saves only States money—and this is precisely the stimulus needed to insure the massive program changes required at the State and local levels. (About 15 States are responding to these stimuli now, and more will soon.) In the long term, because of the higher cost of institutional and nursing care (which will become increasingly more expensive than

community care because of regulation-induced costs), continuum-of-care programs having a set of built-in deinstitutionalization incentives will cost less for all actors.

To develop an explicit continuum of care, there are some minimum requirements:

1. Financing that provides incentives in the preferred direction of the flow of persons.
2. A placement, or placement monitoring, organization.
3. A technology of appropriate placement; e.g., an activities-of-daily-living scale, the scores on which correspond to different level-of-care needs.
4. Defined levels of care, each of which serves distinctly different level-of-care needs.
5. Data on the current placement of persons in the target group, the flow of persons into the placement system, the flow of persons among parts of the system, and the flow of persons out of the system.
6. Data on the costs of care for each level of care, with projections of future cost and expected revenues by source, for each defined subpopulation within the system.

An Example in Child Welfare Services

Under current administrative organization and practice, local family and children's care and service activities are dispersed and fragmented—despite the fact that the history and destinies of families and children with problems that come to the attention of child welfare agencies seem to follow a rather regular chain of events and decisions. Such chains of events and decisions are systems. These systems are largely implicit, yet we ignore the fact that they are systems and that they function as systems. We often tend to ignore the fact that the different service packages—which we generally view as mutually independent—are closely linked to one another in that the same types of persons, or persons from very homogeneous populations, are the beneficiaries. Thus, we treat the price-setting and the funding of child protective services, day care, family foster care, residential treatment, adoptions, subsidized adoptions, and emergency services for children and parents as if each service were a separate and distinct entity. We make separate legislative, fiscal, administrative, and program decisions with respect to each service as if none of the services were related in any way to any of the others. Yet, all of these services form a closely linked (if only informally and implicitly) set of services for a homogeneous group of "neglected, dependent, or abused" children.

Recent legislation (H.R. 3434, now Public Law 96-272, the Adoption Assistance and Child Welfare Act of 1980) was designed partially from a systems point of view. (A model for an information system for State and national statistics might evolve from the new structure and its preferences.)

Thus, the Federal Government has decided that its major child welfare policy priorities are, in order of decreasing preference:

- To provide the basis for the child to live with own family wherever possible (given the child's best interests),
- To have the child be adopted by a family where that is not possible,
- To enter the child into a long-term foster family relationship where adoption is not possible, and
- To provide institutional care as a last resort.

The chain of linked events in the child welfare system structure is approximately as follows. Families in trouble come to agency notice with problems that are either:

1. Transient, in that there is a short-term episodic problem, or
2. Chronic, in that the problem is recurring or there are multiple problems occasioning ongoing general family problems; these cases, may include:

a. Families that can be held together while the problem or problems are solved, or
b. Families that cannot be held together; foster care is needed so that we can deal with each type of family, i.e.,
    1) Chronic, but rehabilitable and reunifiable, or
    2) Chronic, but with insoluble problems, so that we must deal with the children as
        a) Easily placeable, or
        b) Hard to place; for these, we have recourse to
            i. Subsidized adoptions, or
            ii. Long-term out-of-home care, which requires either
                (a) Family foster care, or
                (b) Residential care and treatment.

This list of possible statuses of families in trouble leads to a decision list about each family. For each decision about the family, there is a set of possible actions to take or services to provide. That list of actions, which mirrors the list above, is roughly as follows:

1. Emergency and preventive services will be used (such as emergency day care, chore services, foster care slots, emergency shelter, medical, psychiatric, alcohol or drug abuse treatment, emergency financial assistance, or a planned period of out-of-home care) until the problem is resolved and normal family life can continue.

2.a. Intensive total team services, on the Bowen Center model sponsored by the Children's Bureau, (DHHS/OHDS/ACYF) or similar models, will be used to hold the family together if at all possible.

2.b.1) Intensive team services for reunification, on the Child Welfare League of America (CWLA) *Second Chance for Families* (Jones et al., 1976) model, will be used to move children in placement back to the family where possible.

2.b.2)a) Standard adoption services are used here.

2.b.2)b) These services include, where needed, the services that are noted above, in 1.

For each status, there are a number of children flowing in, flowing out, and remaining. Each status has a cost. The total management system, by which decisions are made about how many children shall enter, remain, and leave, and where they should leave, also has a cost.

From a policy point of view, the amount of Federal investment in services in each status area and the incentives involved will influence or determine the numbers and costs in the system.

To make many of the decisions that must be made about the system (which has an occupancy, at any given time, of more than 300,000 children), the information on flow, occupancy, lengths of stay, cost, current decision methods, current financing, and current organizational incentives must be known. From research, enough is known in a gross way that there generally is agreement among most parties involved to put as much investment as possible (including that usually involved in foster care maintenance) into the emergency and preventive aspects. (This was the intention of those who designed changes in title IV-B in Public Law 96-272.)

However, to make more than such gross investment decisions, far more must be known. Given the current structure of the system, it would appear that an information system on costs, numbers, financing, and locations could, and should, be developed rather quickly. Information on current decisionmaking methods and incentives in the current system should have a major Federal research priority.

With such data in hand, HHS and the States would be in a position to make realistic decisions about the amount and structuring of Federal financing and regulation in the field. The following are some ways in which these services are linked:

There are supply/demand linkages. That is, if prices are raised on one service while held constant on another (e.g., specialized foster family care versus residential treatment care), we may expect to see changes in the flow of children into and out of the two services. The total funding available for each service also influences the size and direction of flow.

There are command/control linkages. There is a flow of children out of the population at risk into the children's system, through that system, and out of the system, which depends not only upon the amount of funding available, but also upon the bureaucratic rules (for screening and intake, service choice, transfer, and discharge) of the system. If the rules for one or more parts of the system are changed, the program emphasis and the configurations of services will change. For example, if the Fanshel rules (which provide that if 2 years have passed without any, or any significant, contact between parent(s) and the child in foster care, the child is then to be released for adoption) are instituted as criteria for choice of children for adoption, the client mix of the foster care *and* adoption programs will change — as will their total costs and their distribution within the system.

These and other linkages exist, and they affect the functioning of every major human services program in a State, whether for the aged, the mentally ill, the mentally retarded (or developmentally disabled), the physically handicapped, the chemically dependent, troubled adolescents, or neglected, dependent, or abused children.

Interagency Net Budgeting

As we have noted earlier, there tends to be fragmented budgeting under current organization and practice in State governments. That is, each major division within the welfare agency looks at its own budget without much concern for the total budget, and even less for the total net general revenue fund (GRF) budget. Beyond that, there is little effort to look at the entire human services budget in the State and its short-term (even less its long-term) interactions. As a result, the education budget, the health department budget, the corrections budget, the rehabilitation budget, the aging budget, the manpower budget, the institutions budget, and the welfare budget tend to be looke as unrelated, individual budgets.

It can be objected that it is not the welfare department's responsibility (beyond a fiduciary one for those interagency agreements that do exist) to analyze the relationship between its budget and the institutions budget, for example. And, it is not. Rather, this should be the responsibility of the human services superagency. *Indeed, it should be one of the main functions of that agency.* If there is not such a function there, then that function should be carried out in the Governor's budget office and in the legislature's research staff.

The interactions between budgets are so powerful, as we demonstrate in later chapters, that — without ongoing, systematic analysis of these interactions and executive and legislative priorities to take advantage of them — States lose available Federal funding that would amount to 20 to 50 percent of all current Federal human services funding for the State. In the case of Arizona (which does not have medicaid and whose State human services budget suffers because of it), the foregone amount is about equal to a 100 percent increase in Federal human services funds. The amounts potentially available will be somewhat smaller, if all current cost-cutting proposals are voted through Congress as presented. However, the amounts of funding potentially available through taking advantage of the interbudget, interaccount relationships will still remain very large relative to any current claiming by States for Federal reimbursement.

The Basic Technique

What happens in interagency net budgeting? This is essentially a form of program budgeting, in which we ask of *all* human services budgets:

1. What are the clinical or problem characteristics of those being served in each program?
2. What are the Federal program-related eligibility characteristics of those being served in each program?
3. What are the locations, types, amounts, costs, and outcomes of services (or at least some rough indication) for each program?
4. What are the Federal program eligibilities of the services being provided in each program?
5. Is each program priced to return full, actual costs on a unit-cost reimbursement basis?
6. What are the Federal, State, and local matching rates for each financing program involved? Which of these programs are open ended?

Once we can answer these questions, at least tentatively, we are in a position to summarize our total Federal, State, and local costs for each program and for all programs in the budget as a benchmark for planning.

We can then ask the question: Are there individual accounting (e.g., pricing), program (e.g., transfer of a specific caseload from one program to another), eligibility (e.g., transfer of some group of clients from one form of eligibility to another, or add some form of eligibility to current eligibilities), service (e.g., provide a service similar to or identical to current services provided, but with different financing) moves, or combination of these moves, that will:

1. Save dollars for the State (or the State and the counties), and replace those State/local dollars with Federal dollars,
2. Provide extra Federal dollars for new programs in desirable areas, while holding State/local dollars constant, or
3. Provide shifts of Federal dollars from less desirable program areas to more desirable program areas, while holding both State and Federal dollars constant?

Once we have found these moves, we assess the effects of each on individual accounts, agencies, and the total State human services budget by comparing the State budget with our benchmark budget. Depending upon the number and combinations of moves we have made, the total State budget may be smaller, the same, or larger. At the same time, the net State dollar total more likely will be smaller or the same (but it could be larger)—while the Federal contribution could be smaller, but most likely will be the same or larger. What *is* certain is that *the overall Federal matching rate for human services will be larger.* This is so certain a result that it may be made a budget test by those interested in State budget performance. If Federal matching rates for a State's human services budget have remained constant or declined in any years prior to Federal Fiscal Year 1981 (which ends on September 30, 1981), then the State has not been thinking interactively at all.

When faced with this result, one of the next questions is clearly: What if all States carried out net budgeting? The human services portion of the Federal budget would probably rise faster than expected, thus forcing Congress to act to "reform" the process. However, given the structure of current Federal funding, this would be almost impossible so long as any substantial human services accounts are left open ended and so long as there are convenient "off budget" sources of Federal revenue (e.g., revenue bonds).

However, it should be noted that, given the way State government works, the process would take 4 or 5 years, even if every State made the process a priority tomorrow. Further, it should be noted that some States will never go into such a process for local ideological and political reasons.

Finally, it should be noted that those States that do go into the net budgeting process *may end up with Federal costs over the long run that are actually lower than those that would have been sustained had the States not gone into the process.* This paradoxical result can occur if the States enter into the process on a program-oriented basis, along the lines we advocate in this paper.

The Interagency Budgeting Organization

As more and more interagency opportunities have emerged during the last 15 years, a few States—impressed by the opportunities and difficulties of interagency budgets—have developed organizations for treating such budgeting and appropriations problems in a systematic, planned way. In some of these States, the instrument was an umbrella organization—usually a department of human services. In others, no need was seen for reorganization; rather, the problem was to institutionalize the interagency budgeting function in an agency that was "senior" to all line human services agencies. More often than not, this turned out to be the State budget office. In a few States, it was a legislative budget or research office. The key points are that:

- The problem was recognized as a multiple-agency problem.
- It was recognized that line agencies are inherently limited in dealing with other line agencies at the same authority level.
- It was recognized, at least in part and at least in its maximization-of-Federal-funding aspects, that the problem is a multiaccount maximization (or minimization) problem in which a number of accounts and populations must be examined simultaneously.

In a few States, the incentive aspects of legislative appropriation procedures have been recognized, but there has been almost no systematic attention to the interaction between appropriation procedures and budget procedures. For the most part, gross-expenditure orientations are still the major approach in the legislature, even if the executive branch has developed an interagency net budgeting organizational function. This occurs because the legislature may be divided into committees that constitute separate power centers for the different human services—and these committees may not communicate with one another. This was the situation in Congress for years, and the situation is now only beginning to come around through reform of the congressional budget process. An integrated budget on the executive side thus may not be institutionally usable on the legislative side. Further, the legislature may now want to accept a net budgeting approach, but would rather live with a gross GRF approach. Finally, even if that approach were accepted, the legislature may not wish to "coddle" the executive agencies in persuading them to "do what they should have been doing anyway," by use of performance incentive formulas linked to federally reimbursed programs (such as the program used in Minnesota several years ago, in which county MH/MR agencies received in the next fiscal year, and in future fiscal years, 1 guaranteed dollar of "service expansion" money for every 4 dollars of Federal social services matching brought into the State).

Even with such problems, it should be noted that a few States have moved either formally or informally (and sometimes only sporadically), in that the budget director and Governor's Office will make separate deals with individual line agencies or combinations of line agencies on specific projects.

The fiscal and programmatic benefits of being willing to overcome the organizational disincentives to multiaccount and multiagency strategic, operational, and budget planning can be very large, as is illustrated in the chapter on continuum-of-care planning for MR/DD populations. But those benefits *must* be very large, given the organizational barriers growing out of the fiscal structure of American human services, if significant program reform is to be achieved.

III. Combining Program and Fiscal Strategies To Refinance and Reform a State MR/DD System

In this chapter, we examine a long-term care-oriented realization of the system-of-care concept. As we noted earlier, if levels of care in a system of care can be understood as existing on an ordered scale, then we have a continuum of care. We shall focus here on the continuum of care for the mentally retarded and developmentally disabled (MR/DD) at the State level of organization. We will show by a "worked example" how the program reform problem is soluble, through the incentive effects of continuum-of-care programming and program management, using maximization techniques.

The Continuum of Care for MR/DD Persons

A continuum of care is a set of care opportunities for a group of persons characterized by similar or identical problems that are ordered according to their intensity of care, their cost, their restrictiveness of environment, or some other dimension.

A continuum can be implicit (simply evolving as a set of fragmented care opportunities that can be described according to the various levels of the continuum that do not operate as parts of an explicit, organized continuum) or explicit (as when organized for programmatic or fiscal purposes — least restrictive and most appropriate placement, or least cost to one or more of the major fiscal actors).

In most areas, the continuum of care is implicit. In the MR/DD area, the continuum's growth was influenced by fiscal history (especially section 1121 and title XIX, ICF/MR legislation, and Title XVI of the Social Security Act), program theory (the rise of habilitation approaches and normalization goals), and court decisions (right to treatment in the least restrictive environment).

The current continuum of care for MR/DD includes the following care opportunities, running roughly from most to least restrictive: State institutions, SNF/ICF's, ICF/MR's (community-based, both large and small), supervised group and apartment living, foster care, independent living, and living at home.

It seems to be established that the great majority of those housed at the more restrictive end of the continuum can be housed (and served) at the less restrictive end, and that once having moved into that end of the continuum, there is noticeable improvement in function. It is less well established, but nevertheless strongly asserted with fragmentary evidence, that the more restrictive the program (holding amount of service constant), the more expensive it tends to be.

Moving into the continuum of care strategy is essentially a systems-oriented approach to policy change and implementation. Some of the tasks involved are:

1. Defining the levels of care, from institution to independent living, with both residential and nonresidential components represented.
2. Developing a registry for all programs.
3. Estimating the numbers (by service need) in each level of care; estimating current flow into,

through, and out of the system; estimating future effects of demography and epidemiology — both with and without policy change — on number and type of services needed.

4. Estimating the costs of each level of the system, by source of payment, for current conditions, and in the presence of policy changes (e.g., effect of Intermediate Care Facilities for the Mentally Retarded policy on institution costs; developmentally disabled persons in nursing homes; effect of emphasizing a community ICF/MR policy versus an assisted or supervised community-living policy; effect of providing out-of-school system services by nonschool providers to Public Law 94-142 populations versus the fiscal effect of providing those services entirely through the school system).
5. Defining a set of policy options involving the whole continuum; choosing one option for a long-term plan (usually 3 to 7 years).
6. Setting up the financing for the plan (State plan and rule changes, capital and operating plans for the legislature, appropriation requests and program legislation change requests).
7. Setting up an operating plan: numbers and location of programs; long-term transfer planning for institutional and nursing home persons; agreements and operating plans for necessary eligibilities for transferees (supplemental security income, Housing and Urban Development, county and district offices of public welfare); and necessary extra appropriations to line agencies.
8. Staffing an operating organization to do the planning and the coordination of agencies.

What We Want To Know in Developing a Continuum of Care

In developing a continuum of care, we would ideally want the actual costs, by client condition, for each level of care; and the outcome, by client condition, for each level of care. We are far from that goal. Nevertheless, there are still some very effective methods for budget planning that we can use.

1. As a start, we can define a continuum of care for a State, even though it may be rough and incomplete. This would be a great advance over the present fragmented approach of solving problems one at a time. The latter approach can, and often does, produce some very odd-looking "nonsystems" of care, in which some less desirable types of service are overfunded at the expense of other more desirable ones.

2. We can define the full budget over a large portion of the continuum. For example, we can define the continuum to be the MR/DD residential service system, together with all-day programming and other nonresidential services provided to clients receiving residential services. We can look at current costs, unit costs, and revenue sources for each level of care in the continuum that we have defined. This leaves out the costs of providing services to all who are *not* clients of the residential service system. However, it does allow a close look at the entire residential (and related nonresidential) cost picture.

3. We can look at costs, both total and net, over more than just 1 or 2 years. This is important for two reasons:

- Significant changes in a State's continuum of care take more than 1 or 2 years. The State must understand its options and the fiscal impacts of each option up to 5 or 6 years into the future; and
- Significant changes in the continuum of care have variable effects on funding and funding incentives.

In the short term, one can expect increases in Federal funding and decreases in State funding. Over the longer term, Federal funding decreases would be realized as well, relative to funding under

less efficient approaches. From an incentive point of view, this is important. States respond to short-run incentives. The Federal Government can wait longer. As a result of planning over the longer term, we can satisfy what under other circumstances would be disharmonious incentive problems. (The problem is simply that States will not move toward large reforms without large incentives. Yet Federal Government people tend to suspect any increase in Federal reimbursements to a State as being a rip-off—unless they can be satisfied that there are cost controls that will eventually produce substantial Federal savings).

4. We can examine alternative strategies. This is essential in planning for a continuum of care. Most State plans for mental retardation do not include all relevant budget items and accounts. They do not examine the whole continuum; they do not examine the effects of the plan over enough years; and, perhaps most critically, they do not examine enough alternatives. Often one plan is laid out—and that is all. However, there are a number of policy options and combinations of policy options that we would want to evaluate:

- Deinstitutionalization goals in terms of numbers of patients affected.
- Deinstitutionalization goals in terms of timing — speed of phasing down or phasing out.
- The effects of varying the speed and scope of upgrading residual institutional beds.
- The effects of deinstitutionalizing nursing homes as well as State institutions.
- The effects of alternative patient choice policies (i.e., Who is selected first for transfer? The best-off patients? The worst-off? A mixture?).
- The effects of alternative community residence policies (i.e., All ICF/MR's? All nonmedical? A "balanced" policy? Will there be size constraints?).
- The effects of alternative revenue development policies (i.e., medicaid all residential? medicaid all nonresidential? medicaid care and treatment staffs only?).
- The effects of alternative housing development policy in the community (i.e., Emphasize existing housing or new? State grant and loan policy or depend on HUD and/or private market?).
- Any underlying assumptions about the relationship between community services supply and the demand for those services by persons living at home (sometimes called the "out of the woodwork" phenomenon).

Depending upon what kinds of models and data we have, we can look at a few or many combinations of policies through simulation (which may be pencil and paper or computerized). When we do that, we can start to understand the fiscal and other effects of following any given set of policies in deinstitutionalization. With that understanding, it will be much easier to justify and to sell a given policy course in a State, whether to the Governor, the budget director, or the legislature.

An Analytic Background

To understand the problem of reforming and managing a large, complex program area in the public sector, we must first understand that we are limited to a handful of basic strategies. Potentially, the most powerful is that in which we develop large sums of "up front" money from sources other than a State's general revenue fund (GRF) to be used as incentives for reforming the total program structure. Thus, we must understand:

- how to "create" the money needed to reform the State's MR/DD system, and
- how to use it in such a way that we get program reform and long-term cost containment.

The first place to look for this money is in Federal accounts already accessed by, or potentially open to, the State. Most States fail to take maximum advantage of all Federal funds available simply because the State departments prepare individual budgets and the legislatures vote on individual program appropriations without taking into account the interactions between the Federal accounts. If

the entire State human services budget were considered as an investment portfolio and both a gross and a net GRF budget were to be developed, there would be far greater opportunities for maximizing Federal reimbursements than now exist. Maximization is possible whenever five basic conditions of Federal and Federal-State financing programs exist in a State.

The five conditions necessary to develop new funding for any service system for a target or categorical group are as follows:

1. *Service definition.* Although different programs provide different patterns of goods and services to their clients, examination shows that there are a considerable number of services in different programs that are the same or similar (various kinds of counseling, residential, transportation, and other services). Also, the goods received are often the same, or they are complete or partial substitutes for one another (medical care, food, cash, and housing). For example, family planning is identically specified in titles XIX and XX of the Social Security Act.
2. *Overlapping eligibilities.* Although different programs are intended to service different groups of people, there are significant overlaps among the groups defined as eligible for each program. For example, a person who is on the food stamp rolls will be eligible, on the average, for more than two other means-tested programs as well.
3. *The irregular match of people and services.* Added to the overlaps mentioned above is the fact that neither the service definitions nor the service eligibilities are completely precise. As a result, there is much room for maneuver in deciding which services people need or should receive. There is a whole literature of studies of the different placements that can be designated (e.g., home care, group residence, intermediate care facilities, skilled nursing facilities, acute general hospital) for a given person, depending upon who is making the placement decision and what criteria are used.
4. *Matching ratio differences.* Most of these programs involve some form of Federal financing, with a matching ratio of Federal and State or local funds. Others, which are nonfederal, involve a match between State and county or State and city. Such ratios generally vary between 40 percent and 100 percent of the money made available by the higher level jurisdiction. At the local level, this means that a 40 percent nonlocal match returns 67 cents for each dollar of local money put into the program, a 75 percent match returns 3 dollars for each dollar, and a 100 percent match is "free" (i.e., does not require that local funds be spent).
5. *Open-ended and closed-ended programs.* Most Federal programs are closed ended; that is, there is an appro- priations ceiling above which no more funds can be spent. Thus, title XX is a closed-ended program; $2.9 billion is its current annual spending limit in Federal funds. Some of the most important programs in human services, however, are open ended: AFDC, medicaid, and supplemental security income, for example. Housing and food stamps programs, among others, have been "quasi-open ended" (in that Congress has decided to treat them as if they were open ended). The open-ended characteristic means that, if a person is entitled to receive benefits under the program, he must be provided those benefits. There is no ceiling.

All five conditions must be satisfied to maximize a financial reimbursement program for a given target group. Since they are satisfied in all 50 States, we can lay out a general example of how to move program dollars across different Federal programs to achieve a higher overall Federal match.

A Worked Example for a Children's Services System

Consider a worked example of how the basic principles operate for program sizes of the scale found in the 10 largest States. Table 1 represents a program involving three Social Security Act

accounts for children's services: title XX, titles XIX and IV-A (considered as one account with, at the beginning, no expenditures), and title IV-B. The first and third are closed ended; the second is open ended. The Federal matching ratios are 75 percent, 50 percent, and 10 percent, respectively. The overall Federal match initially is 50 percent. There is good communication between title XX and title XIX/IV-A. (There are many services provided under title XX that are similar to or identical to services provided under titles IV-A and XIX. Further, many persons eligible for title XX services are also eligible for title IV-A and XIX services). There is poor communication between title XIX/IV-A and child welfare services (little program-service overlap and very little overlap with IV-A eligibility.) There is good communication between title XX and child welfare services. (Foster care, adoption, and child protective services, for example, can be provided under either program, and most children eligible for one program are eligible for the other.)

Table 1
Current Allocations
($ Millions)

Source of Funds	*Title XX*	*TitleXIX/ IV-A*	*IV-B Child Welfare*	*Total Funding*
Federal	240	0	20	260
State	80	0	180	260
Total	**320**	**0**	**200**	**520**

Table 2 represents a move of some of the title XX services (e.g., some health-related services) into XIX and some (e.g., day care services) into IV-A funding, resulting in an open-ended match rather than dealing with the closed ceiling on title XX. At the same time, it frees $120 million in title XX funding for use in support of other services. This move lowers the average Federal match—but only temporarily.

Table 2
Move 1 — Moving Services from Title XX to Titles XIX and IV-A
($ Millions)

Source of Funds	*Title XX*	*TitleXIX/ IV-A*	*IV-B Child Welfare*	*Total Funding*
Federal	150	60	20	230
State	50	60	180	290
Total	**200**	**120**	**200**	**520**

In the second move of program dollars indicated in table 3, child welfare services are placed in the "hole" left in title XX by the first move in order to move from the 10/90 match to the 75/25 match. As a result, the total program is still the same, but the State share (compare tables 1 and 3) has decreased 60 million dollars from current allocations.

Table 3
Move 2 — Moving Child Welfare Services into Title XX

($ Millions)

Source of Funds	*Title XX*	*TitleXIX/ IV-A*	*IV-B Child Welfare*	*Total Funding*
Federal	240	60	20	320
State	80	60	60	200
Total	**320**	**120**	**80**	**520**

At this point, we have achieved only a substitution of Federal and State funds. If the exercise goes only this far, it is basically sterile, because it has not yielded any program reform or service increases in the needed areas. Up to now, it has been only a fiscal exercise for the benefit of the State's general revenue fund. Moving to a reasonable programmatic outcome requires further steps:

- Reaching agreement with budget officials to reduce net State investment from the original $260 million to $240 million (a saving of $20 million); and
- Agreeing to put the remaining State money saved ($40 million) in move 2 into an $80 million expansion of community-oriented title XIX and IV-A services to support a deinstitutionalization initiative.

The last table (table 4) reflects the use of the additional funds for reform—in this particular model $100 million of new Federal money. The net budgeting effect of these moves, which can be seen by comparing tables 1 and 4, is a total program increase of $80 million while the State has managed to recoup $20 million for general revenue savings or other areas of need.

Table 4
Move 3 — Allocating Savings to a Combination of State Budget Offset and Community Program Expansion

($ Millions)

Source of Funds	*Title XX*	*TitleXIX/ IV-A*	*IV-B Child Welfare*	*Total Funding*
Federal	240	100	20	360
State	80	100	60	240
Total	**320**	**200**	**80**	**600**

The operating premise in such models is that negotiations can occur between the Governor's office, the director of the budget, and the legislature. They must agree on a joint utilization of State general fund money for buying reform and/or improvement in the target group delivery system. For this to occur, it is assumed that *there is interagency planning and coordination over the whole system of interest.* Normally, this is impossible. However, if such negotiations are made the precursor of large savings and program expansions, they are quite feasible. Our experience is that a number of States have been able to enter into multiyear, temporary or permanent, arrangements of this sort. Most States could receive an additional 10 to 20 percent in new Federal funding of their public human services system expenditures if they would systematically rework their human services system over a 3-5-year period.

The maximization approach can be applied in a more limited but still very powerful way to "rational chunks" of the human services system. The rest of this section will be limited to analysis of an individual State MR/DD system in order to provide a worked example of how the combination of short-term money creation and long-term system- oriented expenditure controls can result in an MR/DD system configuration that more nearly resembles the kind of system that program theorists and practitioners (and also the courts) tell us we should have.

A Worked Example for a Developmental Disabilities System

We first estimate the total governmental budget in our State for persons with developmental disabilities. Figures that are similar to but not identical to those of several of the larger State governments are used here for illustration. Such a budget, *by source of revenue,* is needed to understand fully the budgetary and program consequences of State and Federal policies and actions. If this full set of costs is not known or is incomplete, the results of State or Federal actions may be perverse.

The Current Total Public MR/DD Budget for an Exemplary State

It should be noted that our estimates do not include any of the voluntary, private, or not-for-profit agency dollars involved in community programs, whether for totally private programs, for subsidizing low reimbursement rates, or for nonpublic capital development. The estimates in table 5 are based on the following assumptions:

a. That 8 percent of the State's division of rehabilitation clients would be classified as developmentally disabled.

b. That 16 percent of the children in foster care institutional placements are classified as developmentally disabled.

c. That 19 percent of the individuals receiving supplementary security income (SSI) in the State are classified as developmentally disabled. (Nationally, 50 percent of children and 13 percent of adults receiving SSI are developmentally disabled.)

The estimates are low since they do not include housing, food stamps, or incidental medicaid medical expenses (which would be 30 to 40 million dollars).

The first four items in table 5 consist entirely of out-of-home care (with related day services). The remainder of the items pay mainly for nonresidential services and income maintenance in the community. However, significant portions of these items as well are for out-of-home care.

Table 5
The Full State MR/DD Public Budget, 1980
($ Millions)

Item	*Federal*	*State*	*County*	*Total*
State Hospital	100.0	200.0	0	300.0
SNF/ICF	16.8	16.8	0	33.6
ICF/DD (Community)	12.5	12.5	0	25.0
Institutional FC	5.7	16.7	0	22.4
Div. of Rehabilitation	8.0	2.0	0	10.0
County Welfare Depts.	2.4	7.1	0	9.5
Regional Centers	0	160.0	0	160.0
Special Education	90.0	180.0	200.0	470.0
SSI	110.0	30.0	30.0	170.0
SSDI	73.5	0	0	73.5
XX	20.0	35.0	0	55.0
Total	**438.9**	**660.1**	**230.0**	**1,329.0**

It would be useful to analyze alternative sets of policies over the whole budget. As yet, however, we do not know enough to do so. Therefore, we will look at a key part of the budget only—a part of the budget that is largely under State control. Here, we should focus on residential services for persons with developmental disabilities, as a portion of the total $1,329 million budget, to illustrate how increased title XIX and other funds could be used. That portion consists of the first three items of Table 5 ($300.0 million, $33.6 million, and $25.0 million, plus $50.0 million in the nonmedical parts of the residential care system).

Tables 6, 7, and 8 represent the 1980 expenditure pattern by category and two alternative projections for 1985. It should be noted that the unit costs in the institutions and the ICF/DD's are "bundled" (i.e., they include all supportive services). The unit costs for SNF/ICF's are "unbundled" and thus probably 2 to 3 thousand dollars too low per unit.

Table 6 presents the current expenditures in the residential care and related services portion of the MR/DD system in 1980. Then, projecting the effects of service changes and inflation on per-patient costs over the next 5 years and applying the projected 1985 costs to each of two different residential configurations of patients in the continuum of care in 1985, we generate two different sets of fiscal projections.

Alternative I (table 7) shows a model of the fiscal effects of proceeding under current plans of the State's department for MR/DD for changes of patient/client location over the next 5 years under this alternative. This alternative gradually deemphasizes State institutional care, but moves very heavily into ICF/DD care while deemphasizing somewhat nonmedical residential approaches.

Alternative II (table 8) is a model for reducing net State costs (and at the same time lowering *total* costs) of MR/DD services through use of nonmedical residential alternatives that provide greater budgeting flexibility for providers and increase continuity and stability for individuals and families receiving services. This alternative rapidly deemphasizes institutional care. Both alternatives assume the State has become more efficient in billing for Federal reimbursements.

Table 6
Public Expenditures in 1980 for Residential and Related Services for MR/DD Persons in the State

($ Millions)

	No. of People	*Cost Per Patient*	*Federal Costs*	*State Costs*	*Total Costs*
Inst'l.	8,700	$34,480	120.00	180.00	300.00
SNF/ICF	2,800	$12,000	16.80	16.80	33.60
ICF/DD	1,000	$25,000	12.50	12.50	25.00
Nonmed.	10,000	$15,000	40.00	110.00	150.00
Total	**22,500**		**189.30**	**319.30**	**508.60**

Table 7
Alternative I for 1985 — Current Departmental Planning

($ Millions)

	No. of People	*Cost Per Patient*	*Federal Costs*	*State Costs*	*Total Costs*
Inst'l.	8,000	$60,000	240.00	240.00	480.00
SNF/ICF	2,200	$19,320	21.25	21.25	42.50
ICF/DD	7,800	$40,000	156.00	156.00	312.00
Nonmed.	7,300	$24,150	108.22	60.78	169.00
Total	**25,000**		**535.47**	**478.93**	**1,003.50**

Assumes an inflation rate of 12 percent per year in State institutions (due to a combination of general inflation plus staff upgrading requirements). Assumes 10 percent per year for all other services. Assumes the State is more aggressive in obtaining full State hospital reimbursement in nonmedical residential programs. Assumes 2,500 more people in system.

296.92 million GRF in 1980 dollars — or a savings of about $22 million over 1980 in 1980 dollars.

Table 8
Alternative II for 1985 — Accelerated Deinstitutionalization

($ Millions)

	No. of People	*Cost Per Patient*	*Federal Costs*	*State Costs*	*Total Costs*
Inst'l.	4,000	$64,000	128.00	128.00	256.00
SNF/ICF	2,000	$19,320	19.32	19.32	38.64
ICF/DD	4,000	$44,000	88.00	88.00	176.00
Nonmed.	15,000	$24,150	231.84	130.41	362.25
Total	**25,000**		**467.16**	**365.73**	**832.89**

Inflation assumptions same as in Table 7. Assumes some increases in unit cost over Alternative I, due to establishment of new behavior-shaping programs in institutions and ICF/DD's, so that there is much greater use of nonmedical facilities and less use of ICF/DD's. Federal reimbursement and service-population assumptions same as in Alternative I.

227.16 million GRF in 1980 dollars—a savings of about $92 million over 1980 in 1980 dollars.

Court decisions and program theory alone would lead us from the most restrictive to the least restrictive residential setting. Yet, fiscal decisions have driven us the other way because current Federal-State funding patterns, as currently understood in State budgeting practice, provide the incentives for institutionalization. Table 8 shows us how to move funding and thus program decisions in the direction we want to go.

In reviewing alternatives I and II, several results become apparent. The projected 1985 costs of alternative II are $170 million less than those of alternative I. The projected 1985 costs of alternative II are $58 million less to the Federal Government than those of alternative I. Therefore, there is an incentive for Federal support for this alternative. Last, the projected 1985 costs of alternative II are about $112 million less to the State GRF than those of alternative I. This comparison of the two alternatives is presented in table 9.

Table 9
Comparison of Current and Projected Costs Under Two Alternatives In 1985 for a State's MR/DD Residential and Related Care Sector

($ Millions)

	Federal	*State*	*Total*
1980	189.30	319.30	508.60
1985 Alternative I	525.47	478.03	1,003.50
1985 Alternative II	467.16	365.73	832.89

When adjusted for deflation (i.e., converted to 1980 constant dollars), the State totals become even more encouraging. The deflated figure for alternative I is $296 million in State spending. For alternative II, the deflated figure is $227 million in State funds, for a savings of $69 million. When the inflation-adjusted GRF for the two alternatives is compared to the current (1980) funding of $319.5 million, alternative II saves $92 million and alternative I saves $23 million.

From a fiscal policy perspective, as well as from programmatic and legal perspectives, it would seem that alternative II should be aggressively pursued by the State. For this to occur, there must be solid interagency coordination and planning with specific targets set out by the budget division, the department, and the legislature.

Accessing Federal Funding for Nonmedical Residential Facilities

To understand the possibilities for achieving a 70 percent Federal reimbursement for nonmedical residential programs (and a 64 percent overall match when the costs of associated nonresidential services are included), consider a model for nonmedical apartments or group homes for individuals who might be classified as mildly or moderately developmentally disabled. The model is a residential group of apartments or small facilities with 24 residents and a staff of 6. One of two approaches for staff organization can be used in this model:

1. The staff may be made up of either self-employed certified providers or employees of a medical service agency different from the shelter/food/maintenance provider agency in order to use title XIX funding, or
2. The staff may be employed by the same organization (as long as the staff costs are less than 50 percent of total costs).

The second approach has been implemented in New York. Texas and Arkansas also have adopted it, and these two States have been working to install it with the help of the Health Care Financing Administration (HCFA) Regional Office.

An example of the funding configuration under either approach is presented in table 10.

Table 10
Nonmedical Group Home Financing: Twenty-Four Residents and Six Staff

Cost Item	*Federal Costs*				*State*	*Total*
	XIX	*SSI*	*Sec 8*	*Food Stamps*		
Staff	60,000				60,000	120,000[1]
Rent		20,000	40,000			60,000
Food & Other		60,000		2,800		62,800
Total	**60,000**	**80,000[2]**	**40,000**	**2,800**	**60,000**	**242,800[3]**

[1] Less than 50 percent of cost (consistent with medicaid regulations).
[2] $10,880 State supplement included.
[3] Total is slightly more than 10,000 per resident.

To implement this model under title XIX, individuals and/or agencies would have to be certified as personal care providers or as rehabilitation services providers. This could include individuals from the

paraprofessional positions all the way through trained professionals, including occupational therapists, physical therapists, etc. Behavior modification could also be purchased as clinic services or outpatient services. The facility need *not* be a medical institution or a medicaid-certified facility.

An important issue regarding the title XIX model is that of how a State can obtain personal care services and day services for persons with developmental disabilities without "contagion" (i.e., having to develop the same services) for other groups. Three options would seem to be possible:

1. Personal care services and day services could be defined in such a way as to be limited by clinical and professional criteria, so that only persons with developmental disabilities could be eligible. This could be done through a new licensing category similar to New York's approach and similar to that being pursued in California in establishing day clinics for diabetics.
2. A second approach is simply not to limit such services to persons with developmental disabilities. If a State starts continuum-of-care planning for its MR/DD persons, it can serve as a model for doing the same type of planning for all other target groups. This approach makes planning, financing, and implementing services for persons with developmental disabilities and persons with mental illness much easier than current approaches. It may be somewhat more difficult to do for other groups (e.g., the aging, the physically handicapped, children), but we have enough demographic historical data where trends are evident and could be laid out for all target groups. A number of States (e.g., Massachusetts, Vermont, Illinois, Minnesota, Michigan, and New York) are doing this type of planning—some more systematically than others.
3. It may be possible to get Federal legislation under title XIX that allows planning separately for the different target groups without having to provide exactly the same services for all medicaid-eligible groups, regardless of need. There have been discussions at the Federal level of allowing categorical service planning for defined target groups under title XIX.

Notes on Implementation

In looking ahead to maximizing a State's Federal reimbursements for the costs of services to persons with developmental disabilities in a way that produces substantial increases in the community level of care, the following important points and recommended changes are:

1. *The establishment of a permanent or multiyear temporary project and budget planning group.* It is essential that someone be responsible for laying out the entire mission statement, doing the estimates, and overseeing implementation. The group must include participation by all appropriate entities, including the legislature and the budget division. The group must look at the effect of budget decisions on program decisions, and vice versa, and package these analyses in an appropriate way for the legislature. The Governor's office might also be involved and perhaps the legislative staffs as well. Illinois used such a group (DD council, Governor's office, and budget office and departments) to develop its continuum-of-care plan. Such groups are routinely organized, on a long-term ad hoc basis, in New York (budget office and departments). The approach cannot work very successfully if housed in the line MR/DD department, given the multiagency problems involved in continuum-of-care planning, financing, and implementation.
2. *Integrated planning for individual transfer between levels of care, complete with project cost.* This should be coupled with a speedup in the deinstitutionalization process. It would seem appropriate to set a goal of 15 to 20 individuals per 100,000 of general population in many State institutions by 1985 or 1986 for States which are now in the 40 to 50 per 100,000 ranges, and there certainly should be no more than 40 to 45 per 100,000 population for any State by that time.

3. *Modification of the State's medicaid program and State plan:*
   a. Establish a personal care and/or rehabilitation program;
   b. Establish a medical transportation program;
   c. Establish a day activity and training program;
   d. Certify community-based MR/DD centers as medical providers for reimbursement for case management, medical diagnostic and therapy clinical services, and proportional administrative overhead. Cost allocation can be a significant factor in generating Federal reimbursements for the administration of the sub-State-regional centers, as well as for departmental central office administrative costs. This will usually require more sophisticated and uniform accounting throughout the developmental services system than now exists and will require immediately increased resources for the department for its own systems and for guaranteeing the uniform data needed at the community level.

4. *Development of a cohesive housing strategy.* The availability of housing is a significant problem nationally. Without adequate community housing, increased community services for the handicapped can be stalled. To solve these problems, the State needs:
   a. Refinement and expansion of the section 8 existing housing program and set-aside for MR/DD persons, as a short-term startup strategy.
   b. Development of a major 202 development program (which will require at least 2 years to even begin to produce results).
   c. Establishment of revenue bond legislation in Congress, assuring exemptions for housing for the aging and for persons with developmental disabilities, mental illness, and physical handicaps in the community. The fiscal design here should ensure that real estate taxes be paid to the areas having new housing. Establishment of a State housing agency program, using general obligation and/or revenue bonds, should follow.
   d. The development of a package for private market investors, including bonding and sale-leaseback components, can be carried out at the same time as part of a long-term care housing-creation strategy.

5. *Reevaluation of current deinstitutionalization planning.*
   a. Speed up the deinstitutionalization process, especially if the HCFA issues a deinstitutionalization-oriented regulation in this area;
   b. Obtain post-1982 waivers for State hospital beds, tied to a meaningful phase-down plan;
   c. Reprogram State hospital construction for the community, if it is not already too late. Also, given the significant capital outlay that legislatures have invested in bringing State hospital buildings into Federal fire and life-safety compliance by July 1980 (or, in some States, 1982) to protect title XIX funding, plans should be suggested to the legislature for transferring surplus buildings (which would no longer be used in the MR/DD program) to other State agencies for alternative uses. One possibility, given current needs in the States, would be to transfer some of the facilities to State departments of corrections.

6. *Development of a statewide training effort* The current national title XX training strategy is tied primarily to local county welfare agencies and graduate schools of social work, with little or no relationship to the MR/DD system. One of the original intents of title XX training and title XX service legislation was for training and retraining of workers in the deinstitutionalization effort. Funds were supposed to be marked for training and retraining of institutional and community service staff for community service programs.

   Unfortunately, the Federal Government did not implement congressional intent in the regulations. As a result, any training in developmental disabilities has to be paid for with other funds. This was a tragic outcome for the social services movement, since developmental programming is an effective treatment strategy for which people can be trained in

such a way that their efforts have high payoffs. As such, it would have provided a politically popular example of effective training, coupled with the politically popular deinstitutionalization policy.

Since there never has been funding specifically earmarked for such a training approach, one of the deficits of the current, growing developmental disabilities community service system throughout this country is that a large number of intelligent and enthusiastic people are employed who do not know a great deal about the developmental model. As a result, some people with more severe disabilities who are returned to the community from the institution cannot be maintained in the community. The result is either a return to the institution or a lack of any further improvement once the person is in the community. In the training area, several needs are evident:

a. The need for developmental training teams within the State MR/DD institutions to prepare people to return to the community and to train community staff in maintaining them in the community.

b. The need to train community-based MR/DD case managers in the area of resource development (and the need for a uniform resource development technology). At a minimum, there are needs for a standard updated resource development workbook (later, a computer-aided eligibility calculation, referral, and benefit and resource maximization system), resource advocacy, and individualized program plans, objectives, and monitoring of these plans.

c. Care-provider training in the areas of writing objectives, program planning, and elevating expectations, as well as behavior management.

7. *The development of supporting documentation.* Needed here are service packages, including staffing models for both in-house and nonresidential services, by level of care, with detailed cost and revenue expectations. In addition, drafts of needed State plan changes, State rule changes, pricing methodology, and provider concept must be developed.

8. *Assessment of OASDI eligibility.* The State should evaluate all persons in the system in relation to their SSI eligibility status. Apparently, a large number of individuals currently receiving SSI are in fact eligible for OASDI, but have not been brought on the rolls. Increases in OASDI enrollment would have two effects in the State. First, the amount of State support would be reduced. In addition, after 2 years of OASDI enrollment, individuals are eligible for medicare, which is 100 percent federally financed. There are 440,000 MR/DD people on OASDI in the United States. There may be another 40 to 80 thousand now on SSI who would also be eligible for OASDI, thus reducing State-local costs. Further, if we could find those individuals currently in a State who have been on OASDI for at least 2 years, a federally funded home care program could be begun almost immediately. (The medicare provisions of the Reconciliation Act of 1980 indicate that this is possible. It should be noted, however, that the current administration is already moving to attempt to cut back on the "unlimited home health visit" provision of the act. Even if this occurs, however, there are still some excellent fiscal and program reform possibilities here.)

9. *Development of a management information system.* For any or all of the above to occur, there must be a solid data base for current and future need projections. This means that if a State's management information system does not support the reforming and refinancing of the State's MR/DD system, it should be revamped to do so.

IV. The Basic Techniques Of Maximization

There are more than 300 Federal human services funding accounts. Most of them are Federal-State programs, or they closely interact with Federal-State programs. Some are open ended. All of them satisfy the five basic rules for maximization outlined in the second chapter of this paper, and many of them are the responsibility of State and local governments. If they are to be interwoven into rational systems of service and care, the basic techniques of maximization must be understood. Without such techniques, there would be very few incentives to those who actually must do the job, or must politically support doing the job, of designing and building those systems.

Introduction

As we do in a number of places, we must again return to the question of pure maximization—i.e., maximization of Federal revenues as a pure offset against the State portion of an already rigid configuration of total human service investments. To some extent, this is always "part of the game" for budget people and politicians. However, to the extent that it is followed, it means the loss of the limited number of opportunities available to the States for restructuring and reforming their service systems. Since the outstanding potential for reform is found in aging, mental illness, mental retardation and developmental disabilities, child welfare, and prenatal and child health care, at a minimum, State governments can hardly afford to squander the potential instruments for reform that exist in the form of new financing opportunities.

While most public discussion of these tools has centered around intertitle transfers (moving caseloads and services from one title of the Social Security Act, usually closed ended or with a lower Federal matching ratio, to another title of the Act that was open ended and sometimes with a higher matching ratio), there are actually a number of techniques that may be used for Federal funds maximization. Some are purely matters of administrative efficiency. That is, human services agencies over the past few years have been subjected to large, complex, and quickly increasing tasks, with no real tradition of skill in modern administrative techniques; and many of what might be labeled maximization techniques should really be categorized as "pulling up one's socks" administratively.

For example, the use of cash management techniques by human services agencies was 5 to 10 years behind business use of these techniques, and their lack often resulted in losses of as much as 5 percent annually in Federal reimbursements. Human services pricing has been and remains a shambles, whether in the cost-allocation or cost-finding areas. Eligibility systems should be integrated quality-control systems — not just as a maximization technique, but as a standard way of exerting managerial control.

All of these techniques are also (or should be) standard technologies of care and services systems — if such systems are to be able to deal with massive numbers of cases, transactions, and documentation requirements in some understandable "total system" way. In short, it can be argued that the techniques to be used to maximize Federal revenues are the same techniques required to manage, in any effective way, large human service agencies.

We will discuss a number of these techniques in this section — some rather generally, some in detail. For those with further interest in such techniques and how to carry them out, the authors

provided long lists of accounts and some "how to" information in the Child Welfare League's *Financing Services for Children Through Title XX and Other Programs*, (Copeland and Iversen, 1975-1978) a five-manual analysis of title XX and its place in financing and planning human services. [Published by the Child Welfare League of America, 67 Irving Place, New York, NY 10003.]

In this chapter, we discuss four technical areas of Federal funds maximization:

- Upgrading Eligibility
- Upgrading Pricing Practices
- Intertitle Transfers
- Capital Financing.

A fifth technical area, that of cost allocation, might also be included in this chapter. However, the problem is so important to States, the material so complex, and current State (and Federal) performance in this area so bad that we believe the subject deserves a separate chapter—chapter 5 of this paper.

Upgrading Eligibility

In planning service systems, attention must be paid to the eligibility function, since it contributes to general maximization of Federal funding and provides one important fiscal basis for increasing programming at the normalized end of service continuums.

There are four characteristics of human services program eligibility that are important:

1. A person eligible for any one program is generally eligible for more than one program. For example, a person receiving food stamps is generally eligible for two or three other federally funded programs.
2. The programs for which the person is eligible will range from no Federal matching (totally State programs) to 100 percent Federal matching (social security disabled child or disability programs, medicare, section 8 housing).
3. Except for medicaid (which can be, within limits, redesigned by a State to be community-oriented), most high-match Federal programs are actually or potentially "pronormalization."
4. Many of the high-match, pronormalization, federally supported programs are open ended or nearly so (and current Federal budget proposals may not change this pattern).

Given these characteristics, there can be found persons already on public rolls whose net costs to the State can be reduced by providing them the opportunity for more normalized levels of living and service on the continuum of care. Some examples:

Persons in State Institutions. For a number of reasons, States often do not pay close attention to eligibility. For example, a number of States have shown that 90 to 98 percent of all persons in State MR/DD institutions are eligible for supplemental security income (and thus for medicaid). If we look at State performance, however, we find that virtually all States have institutional ICF/MR programs, but many of them are collecting medicaid for only 40 to 70 percent of their patients.

One usual reason (among several) is that there has never been a tightly administered, ongoing eligibility development program. The establishment of such a program in the administratively laggard States will tend to show 5 to 15 percent immediate increases in the percentage of patients eligible for medicaid. There are other reasons. For some persons, the $25 per month personal allowance

payments under SSI are not spent in their behalf initially, nor is the trust set up for the future use of the funds in the community. As a result, these persons become ineligible for SSI — and thus for medicaid — because of the SSI resource limitations.

Some States have negotiated deficiency correction plans that do not include funding for upgrading State facilities that house large numbers of medicaid-eligible patients. There is a disinclination to spend $4,000 per bed for life safety improvements for the period of time States would be operating those beds prior to their being phased out. For these patients, care could have been federally reimbursed during a 5-year period at a level totalling $50,000 to $60,000 per patient. One of the smaller Middle Atlantic States lost $25 million over the last 3 years for this reason alone.

There is a further problem. Medicaid is not the only—nor even the best financed, from a State point of view — program for persons in State institutions. The Social Security Administration's Old Age, Survivors, and Retirement Insurance (OASDI) program is superior. Persons over 18 years of age who are chronically and severely disabled and whose parent or guardian is a retired or disabled recipient of social security, or whose deceased parent or guardian was covered under social security, are eligible for social security payments. Also, after 2 years they are eligible for medicare payments — with both of these payment sources being totally federally financed.

The Federal reimbursements here will amount to 5 to 10 percent of total institutional cost. That amount can be taken off the top of the institutional cost on a "first dollar" basis, thus saving 2 to 11 percent of the State general revenue funds invested in the institutions—depending upon the Federal medicaid match for that State, the percentage of actual institutional cost that is included in the approved per diem cost of the institutions, and the percentage of actual costs now being billed. For example, one Midwestern State, which recently began billing Medicare for such patients, is being reimbursed about $1,700 per patient, on the average, over *all* institutional patients.

There is a further note of interest here. Despite the fact that the Social Security Administration hopes that OASDI eligibility screening for SSI recipients is automatic, it is not. A number of persons get left out of the process of eligibility for social security. We became suspicious about the existence of such a problem when we saw data on a large proportion of persons in MR/DD institutions who were older but were not on OASDI. This is a counterintuitive finding if OASDI eligibility were really "automatic" for SSI-eligible MR/DD persons. That is, if an MR/DD person is 35 to 45 years old or older, his parents would be of an age where there would be a high probability of their being deceased or retired or disabled social security recipients—thus qualifying him for social security. An executive of the Association for Retarded Citizens has reported that the Social Security Administration has been surveying day programs in the Bay Area of California and has found that about 15 percent of all day program enrollees are eligible for social security but are not on the rolls.

There are program implications here. Social security and medicare (for which disabled persons admitted to social security are eligible after a 2-year wait) are easily "exportable" from institutions to the community without any decline in benefits. (Indeed, the medicare benefits are better in the community.) Since community residential programs tend to be less expensive than institutions, and since community home-oriented programs tend to be much less expensive than community residential programs, the more the benefit eligibility for the more normalized programs can be maximized, the better fiscal basis we will have for emphasizing them.

The programmatic implications of improved funding are different for medicaid. Here, finding better medicaid funding for institutional care — and concentrating only upon institutional financing — will tend to increase incentives to institutionalize. This is the reason that continuum planning is so important. That is, even with "easy" medicaid funding in the institutions, it can be shown that community programs cost less, not only in total funds expended per patient but also in net State costs — and that, over the longer term, one may expect Federal savings as well.

As a last point in eligibility for State institutional populations, attention should be paid to private insurance programs, of which more and more are including long-term care funding as one of their benefits.

Persons In Community Programs. In the community programs, eligibility considerations are difficult. Nevertheless, there are great opportunities. Some examples:

States tend to pay the total residential and service costs for persons who are not now receiving SSI but who would be eligible if brought through the eligibility process. Few States have systematic, ongoing screening of general assistance (GA) and AFDC caseloads for SSI and OASDI eligibility. Yet, movement from GA to SSI can convert a person from a 100 percent State-local responsibility to an almost 100 percent Federal funding responsibility. In the case of AFDC families, movement of a child to the SSI rolls will add to the family's income and make the child eligible for more and better services while reducing the State's costs as well.

In child support development cases, at least one State has found that about 50 percent of absent fathers have health insurance and will allow its use in behalf of their children. This further reduces medicaid costs.

Few, if any, State or local governments have ongoing, systematic, computer-aided resource development programs. Yet, again and again, individual projects show huge returns. There are about 26 major Federal and Federal-State programs in which there are large eligibility and service overlaps (including, for example, veterans' programs, CHAMPUS — Civilian Health and Medical Program of the Uniformed Services, social security programs, housing, nutrition, and social services programs). Systematic resource development functions should be a standard part of administrative and case management in full continuum management programs or, at a minimum, in community MR/DD programs.

Upgrading Pricing Practices

The pricing of services is an area that seems arcane and "technical" to professionals in human services. It is indeed technical — but its effects on service programs can be great. We have found States that are losing more than $100 million per year in Federal reimbursement in the MR/DD area alone because of antiquated pricing methods. There are two important problems in this area:

- Maximizing reimbursement and understanding "real costs" by assuring that all components of cost are included in the price of care and service.
- Setting prices in such a way that, at a minimum, bizarre incentives are avoided and so that, if possible, positive incentives are included in price.

Assuring "Full Cost" Pricing

Although we would assume that all State and local governmental programs and all nonprofit agencies would want to be paid the full cost of their services, it is quite common to find that such groups do not charge the full cost. This sometimes happens because the payor agency will not pay the full cost of services. More often, it happens because the vendor agency (usually a governmental or nonprofit agency) simply did not include all costs in its cost-finding and pricing process. Or, if all such costs were included, it did not ask for the full price when billing for them.

One of the most common errors is not including some important cost items in the calculation of price. One example is the failure to include overhead or administrative items. Many service-provider agencies are the bottom level of a complex bureaucracy. For example, in a State government, elements of the costs of the Governor's office, State staff services, and the like can be included, in some proportion, in the costs of the human services superagency. Some proportion of those costs, plus a proportion of the superagency's costs, can be included in the total costs of all line agencies. Some proportion of those costs, as well as each individual line agency's administrative costs, can be integrated into the per diem or per visit charge or whatever unit of cost is used by the service-provider agency for billing the Federal Government, counties, insurance companies, or private payors. The problem here is that not all such costs are included within the cost structure. (This problem is not exclusively one of government; private agencies — especially nonprofits — with any degree of

organizational complexity have the same problem.) The Code of Federal Regulations, in Volume 45, Paragraph 74 and associated appendices, deals with the possibilities here in detail.

Standard cost items may also be omitted in costing out an agency's services. Although it would seem impossible *not* to include all standard cost items, it is quite common to encounter governmental and nongovernmental agencies that do not include fringe benefits or some amount for capital costs in their pricing. The main reason for this is that these items are not included in the main appropriation or budget item for the service of interest. It is not only important that these items be included; how they are included is extremely important.

- It should be noted that fringe benefits are not always what they seem. For example, the governmental or private agency may be systematically underfunding future pension obligations. Depending on the State's total current and potential revenue structure, it may make good fiscal sense to fund fully future pension obligations on a current basis and to include this cost increase in the price of service.

- Including capital costs in the price of the service allows for even more possibilities than fringe benefits. Large portions of the complex alternatives available in for-profit real estate markets may be used in governmental and nonprofit areas. We discuss some of these possibilities in our *Manual 1, Finding Federal Money for Children's Services* and in the last subsection of this chapter.

Not billing for the full, known cost of services is another practice that contributes to inadequate pricing. In a number of Rocky Mountain and Western States during the early and mid-1970's, there was some fear that if full cost were to be billed for institutional services in mental health and mental retardation, then private-sector skilled nursing facilities would demand just as much.

This occurred in spite of the fact that Medicaid regulations *allow* for separate costing for ICF/MR and *require* a "reasonable cost" approach for State institutions. Because of this approach, a number of States have underbilled HCFA by as much as 60 percent of actual allowable reimbursement over the past 7 years—especially in institutional ICF/MR's. We have found these problems also in Middle Western and Eastern States, though the proportion of the losses was less than in the West. The actual funding loss in States having these problems has ranged between 10 and 30 percent of the total cost of running State institutions.

Intertitle Transfers: Movement of Programs From Higher Net State Costs to Lower Ones.

Given that the five basic conditions for maximization that were laid out in chapter III are satisfied, a number of transfer rules can be developed for programs so that maximization goals can be reached. Among the transfer techniques are the following:

1. *Moving a specific caseload from a higher cost program to a lower cost program.* This is more an "efficiency" rule than a Federal funds maximization rule. However, without such a rule as this being part of a larger plan for program reform, increasing the Federal match will be seen as "taking unfair advantage" of the Federal Government. Several approaches may be taken:

One approach is to deal only with persons already in the residential care system. Here, the problem is to move persons from the higher cost areas (such as State institutions) to the lower cost areas (such as small community ICF/DD residences and associated programs, nonmedical residential and associated programs, independent living, or home care). This approach is a key part of a continuum of care planning and refinancing strategy. But a State may want to do more.

A preferred approach is to deal also with persons in the community in danger of entering the residential care system. Nationally, the cost of residential care and associated programs appears to

be somewhere on the order of six to eight times the cost of home-oriented programs in the MR/DD area. Therefore, any program that can make it possible for a person to stay in some form of home care with adequate services, even if such a total program might cost more than current averages, would help in cost containment within the MR/DD, mental health, and aging systems. This means that family subsidy and personal care programs, which are considered to be useful in reaching normalization objectives, should become priority programs in the use of newly available funds.

2. *Transferring a specific caseload from a lower match Federal matching ratio program to a higher match program.* This is the key set of moves in maximization. The major rule of thumb here is: *Always transfer caseloads from closed-ended programs to open-ended programs.*

For most State governments—and perhaps all of them—this rule will always hold, *even when the Federal matching ratio is lower for the open-ended program than for the closed-ended program.* This is true because within a net-budget multiaccount context there are always a number of programs in human services that are funded with all State or State and local funds. There are two types of transfers — direct and indirect.

Direct Transfers. A direct transfer is one in which the redeployment of services moves from a directly 100 percent State and/or local funded program to an open-ended federally matched program. (Here, open ended can mean exactly that. The Federal Government appropriates "such sums as are necessary" based on the needs of clients, their meeting the eligibility rules of the funding program, and the costs of needed benefits or services. However, it can apply also to a closed-ended program where the available Federal allotment has not as yet been used up.)

Indirect Transfers. An indirect transfer is somewhat more complicated. Here, the transfer of services is from a State/local funded (or any lower federally matched) program *through* another intermediate federally matched program *to* the final open-ended, federally matched program. The matching ratio of the intermediate program can be high or low, since it does not enter into the final fiscal value of the transfer. All that matters, fiscally, is that Federal matching rate of the first program, from which the migration of caseload and services starts, is lower than that of the last program, to which the final transfer is made.

The need for indirect transfers arises because of the lack of "communication" betweeen programs. Communication is defined as the joint match of allowable services, person eligibilities (both categorical and income/wealth), and service needs among two or more programs. Thus, some programs will have very little or no communication between them, while others will have large areas of communication. (The previous chapter of this paper illustrates the workings of the communication concept in practice, in the context of a three-program example.)

In that example, there is good communication between title XX and titles IV-A and XIX of the Social Security Act for children's services; there is also good communication between title XX and title IV-B of the Social Security Act. There is, however, almost no communication between title IV-B and titles IV-A/XIX. That is, there are many family and children's services under title XX (e.g., child care services, homemaker services) that can also be provided under title IV-A for AFDC-eligible families. There are also many health-related services provided under title XX that can also be provided under title XIX for those persons who are eligible for both programs (e.g., all the services now provided as "integral but subordinate" medical services under title XX programs, which could be paid under title XIX if they were separately booked). At the same time, both title XX and title IV-B provide for rendering identically defined adoption, foster care, protective, emergency, and other child welfare services. Further, most persons eligible for IV-B services are eligible for title XX services. As a result, starting with low-Federal-match IV-B services moving to title XX and continuing with an equal-expenditure amount of services moving from title XX to federally matched, open-ended titles IV-A/XIX, we end up with an increase in the average match.

We may extend the concept to one of multiple direct and indirect transfers when we wish to redesign a whole system of programs in which the maximization of the average Federal match is but one of several goals. The combined use of State-local, title XVI, title XIX, OASDI, title XVIII, section 8 (HUD), and food stamps funding (also discussed in the previous chapter) is an example of a program-oriented application of this approach.

Capital Financing: Self-Financing or Nearly Self-Financing Facilities Construction

A key problem for the service planner is that — for many types of programs — a new residential treatment facility is needed, whether a halfway house, a child welfare institution, an intensive treatment facility, an intermediate care facility, a skilled nursing facility, a hospital for the physically handicapped or mentally ill, or an intermediate care facility for the developmentally disabled.

In many cases, the planner will find that the need for the service is accepted and the possibility of including its operating costs in a departmental budget is acknowledged, but there is no facility available that meets the standards of the funding program. In some cases, facilities must be upgraded, with a considerable sum of up-front money needed to do so. Often, new facilities are needed.

Such large, one-time investments often are more difficult to make than year-to-year operating investments. Any veteran of a bond issue struggle will acknowledge that. Bonding authority usually must be taken to the public on a one-at-a-time basis, costing its proponents considerable political capital. Appropriations are somewhat easier, since they go through the regular legislative process. However, legislators voting for capital appropriations sometimes are labeled "big spenders" by their political opponents, so capital appropriations can be politically difficult as well. Leasing the needed facilities is the most popular method, since it adds only marginal amounts to the published budget for a given year. But, until the facilities are available in the condition needed, simple rental approaches will not solve the problem.

One way the planner may argue for development of the needed facilities is to use an economic analysis that concentrates on net costs to the State budget of the important alternatives, bonding, appropriations, and leasing.

First, it is necessary to point out the returns accruing to capital financing for facilities whose operations are in part federally financed by actually calculating the expected *net* cost to the State under several conditions. For example, consider a $1 million intermediate care facility for mentally retarded and developmentally disabled persons. The three approaches are as follows:

The Net Cost of Bonding: The Least Expensive Approach

If financed by State- or local-issued revenue bonds at 11 percent over a 30-year mortgage span, the annual gross payment on the $1 million mortgage will be $106,079 per year. However, its *net cost* to the State will be less, depending upon the State's medicaid percentage and the proportion of residents eligible for medicaid, since the bond costs can be considered part of the reasonable cost of operating the facility and can be included in the rate charged for services. Consider two kinds of States (a 50 percent medicaid-match "rich" State and a 70 percent match "poor" State) and three levels of eligibility (none of the residents eligible, 50 percent eligible, and all eligible). Table 11 presents the net cost to the State per year for the term of the mortgage.

Table 11
Net Annual State Cost of Bond Repayment
Under Differing Assumptions

Federal Medicaid Percentage	Percentage of Residents Eligible for MA 0%	50%	100%
50%	$115,025	$86,268	$57,512
70%	$115,025	$74,766	$34,507

Because there is Federal matching, the net annual cost to the State declines as the percentage of residents being paid for under medicaid increases. The decline is faster and the net cost lower in States with the higher medicaid reimbursement percentages.

The figures in the example make clear the advantages in capital financing of having a large portion of the residents in a facility under medicaid or other third-party programs. In this example, some States could have $700,000 of every $1 million in capital financing covered by Federal payments—with only $300,000 of each $1 million a direct burden on the State budget.

The Net of Cost of Leasing: Less Expensive Than It Looks

Suppose, however, that the current market for public bond issues is difficult, as is now the case in some States. A leasing approach can be used to finance the facility. The State or local government may be legally free to provide a long-term lease guarantee to a nonpublic corporation that will build the facility, then sell it, and lease it back immediately (at a lease cost which would be equivalent to an annual 22 percent interest payment on the investment). [Note: The State could probably sell facilities in current use only with specific legislative authorization.] In this case, the *total* cost (not net cost) of the lease will be higher than the total cost of paying off government bonds—about $105,000 per year, but the net cost differences can be quite a bit smaller—as little as $31,500 per year at the point where all residents are eligible and the matching rate is 70 percent. Consider again the two kinds of States and three kinds of eligibilities. A comparison is presented in table 12.

Table 12
Net Annual State Cost of Lease Payments
Under Differing Assumptions

State Medicaid Percentage	Percentage of Children Eligible for MA 0%	50%	100%
50%	$220,000	$165,000	$110,000
70%	$220,000	$143,000	$ 66,000

Although the net costs are higher than the bonding alternative, the leasing approach avoids the problems that may be associated with attempting a bond issue.

Paying by Direct Appropriations: Sometimes the Most Expensive Way

There is a third alternative: to directly appropriate the $1 million for the facility. This is the most popular alternative in many States — "pay as you go."

Despite the familiarity and air of frugality, direct appropriations have two distinct disadvantages. Like the bond issue, they require that all the money be spent up front, which can be politically difficult. *A worse disadvantage: It can be the most expensive alternative the State can use.*

Two important factors make appropriations expensive. First, appropriated money has an "opportunity cost." Instead of appropriating the $1 million for the facility, the legislature could appropriate it for use in other alternatives—one of them simply investing the money (possibly at an interest rate of 18 percent). So, the appropriation of $1 million can be considered to have a real annual cost (at that interest rate) of $180,000.

The second important factor is that of return. Under medicare and Medicaid rules, the capital cost of the facility may be included in the reasonable cost of operation of the facility. Thus, debt service and amortization of bonds or lease costs can be included in the per diem or other charge for the facility's services. However, in a facility constructed with appropriated money, only a depreciation or "use" allowance taken as a straight-line depreciation percentage of the construction cost of the facility can be included in the reasonable cost of the facility. Thus, for a facility with a 40-year expected life and no salvage value, 2.5 percent per year of the cost of construction—or $25,000—is returned. All of this return, however, cannot be deducted from the $180,000 annual cost of the construction money. Only that part that represents the Federal contribution to medicaid can be so deducted. Therefore, the annual net capital cost to the State for the facility is a function of the State's medicaid percentage and the percentage of residents eligible for medicaid. Consider again (in table 13) the two States and three eligibilities.

Table 13
Net Annual State (Opportunity) Cost of Appropriation Under Differing Assumptions

State Medicaid Percentage	Percentage of Residents Eligible for MA		
	0%	50%	100%
50%	$180,000	$173,750	$167,500
70%	$180,000	$171,250	$162,500

Comparing the Three Alternatives

A comparison of the three examples (table 14) indicates that a bonding strategy will be superior to an appropriations strategy regardless of State medicaid percentage or the percentage of residents eligible for medicaid.

Table 14
Comparing the Three Alternatives

Percent of Residents Eligible for MA	State Medicaid Percentage	Bond	Lease	Appropriation
0	50	$115,025	$220,000	$180,000
0	70	115,025	220,000	180,000
50	50	86,768	165,000	173,750
50	70	74,766	143,000	171,250
100	50	57,512	110,000	167,500
100	70	34,507	66,000	162,500

On straight cost criteria, bonding is always superior to leasing. But the relationship between leasing and appropriations is sensitive to both the medicaid reimbursement percentage and the percentage of residents eligible. In States with high medicaid reimbursement percentages, if the percentage of residents eligible for care under medicaid or other third-party payments is over 50 percent in an institution, leasing is clearly superior to appropriations. In States with lower medicaid reimbursement percentages, it is only at eligibility levels of 42 percent or better that leasing equals or betters appropriation strategies.

As a rule of thumb, if a facility's net non-State reimbursement (i.e., its revenues from all third-party or direct patient payments after deduction of State-local tax portions that may be included in the payments) is greater than 21 percent of total operating budget, then leasing is fiscally superior to appropriating for a State or county government; if that amount is less, then appropriating the amount is superior. [Note: Examples of types of payment: medicaid, medicare, Aid to Dependent Children Foster Care (AFDC-FC), title XX, SSI, Blue Cross, CHAMPUS, and payments from the patients or patients' families.]

There is an additional advantage of leasing not included explicitly in the net cost calculations—the return of the facility to the property tax base, thus returning $40,000 to $50,000 per year per million to city and county governments and school districts and decreasing the need for the State government to provide property tax relief.

In the case of adequate facilities not yet in existence, the leasing approach needs some qualification. Where nongovernmental organizations will operate the facility, there must be an implicit or explicit long-term lease guarantee if a nongovernmental mortgage market is to be created for remodeling or new construction of such facilities. Someone must build the facility. If the human services organization can work with its bank, having in hand a letter of intent for a long-term lease commitment from the government will greatly simplify the task of financing the facility.

A Worked Example of a Low-Net-State Cost Sale-Leaseback Technique

In the case where a government cannot provide long-term guarantees, it can have a low-profile "temporary appropriation" approach in which the government appropriates the money for a facility, builds it, sells it to a leasing corporation, uses the proceeds of the sale to reduce the appropriation cost to zero, and takes a lease on the facility for operation by either the government or by a

nongovernmental corporation with a separate contract to manage the program. Under certain circumstances, this strategy can be the least expensive to finance many new, smaller facilities for normalized programs. A worked example of one of the many possible variants on this approach is given below. (Note that the amount involved is $10 million, not the $1 million discussed in the examples in the previous section of this chapter.)

A State may, for many of its community facilities needs, develop a construction program having a net cost of $10 million by following these steps:

1. Put out a $10 million bond issue for 30 years at 11 percent, with an annual payment of $1,150,246.
2. Use the $10 million in bond proceeds to build $10 million in new construction.
3. Sell the new construction to a leasing company, paying an annual lease payment of $2,200,000 (a 20-year lease at 22 percent).
4. Put the proceeds of sale — $10 million — into a 20-year annuity, yielding $1,800,000 per year. The proceeds are to be used to partially defray lease and bond costs. [Note: This "annuity move" is used here only for comparison purposes. In actuality, the proceeds are returned to the State general revenue fund. Otherwise, the State might have problems with the law on arbitrage.]

The costs to the State, when this sequence of steps has been completed, are as follows:

A. Annual cost without regard to tax and reimbursement repayments:

1. Lease Payment	$2,200,000
2. Bond Payment	1,150,246
Subtotal	3,350,246
3. Less: Investment proceeds	1,800,000
Net Annual Cost Before Reimbursements	$1,550,246

B. Annual State budget net cost after medicaid reimbursement repayments:

1. 40% of total cost	$670,246
2. 50% of total cost	$440,246
3. 60% of total cost	$230,246
4. 70% of total cost	$10,246

C. Annual cost to the State/local/public fisc after reimbursement repayments and tax payments from property returned to private rolls through lease policy. (Here we assume that, out of lease payments, $400,000 per year in tax payments — which are paid in part by third parties, e.g., medicaid, medicare — are divided between those governments benefiting from property tax.)

1. At 40% of total cost	$510,246
2. At 50% of total cost	$240,246
3. At 60% of total cost	($9,754) surplus
4. At 70% of total cost	($269,754) surplus

As new facilities come on-stream, they may then be sold and another cycle begun. Savings come from three sources (sources not available to the pay-as-you-go appropriation approach or the straight bonding approach).

1. Appropriation returns only straight-line depreciation of historic cost as "imputed financing cost," compared to the "reasonable cost" of construction that may be included in the cost of operation for bonded or leased facilities.
2. The spread between tax-exempt interest costs and annuity returns on the invested proceeds of sale $10 million.
3. The return to the tax rolls of the leased property, with Federal reimbursements paying 40 percent or more of the tax costs in the lease payments.

It should be noted that, for State-related facilities, *any non-State revenue* should be treated as reimbursement return. Thus a facility with 80 percent of its revenues from medicaid in a 50 percent Federal medical assistance reimbursement State, 15 percent from medicare, and 5 percent from Blue Cross (or billings to patients) would be counted as a 60-percent-reimbursed facility. That is, the State's reimbursement rate is 60 percent of total costs (50 percent of 80 percent is 40 percent Federal reimbursement, plus 15 percent medicare, plus 5 percent from other sources). The State is liable for the remaining 40 percent.

The last element of profit is that for the leasing firm. It takes the depreciation on $10 million of new construction on a 20-year basis, thus covering all the profit in the deal and a substantial amount of profit elsewhere.

This last item, the leasing firm's profit, should be a consideration in any plan involving sale-leaseback. In a very real sense, the leasing firm plays the role of a middleman whose services are needed solely because of regulatory constraints that prevent State and/or local governments from employing tax revenues efficiently. That this intermediary's services are necessary perhaps should suggest that the Federal rules on depreciation and/or use allowances are antiquated, are a factor at work in increasing Federal costs (not decreasing them), and are no longer necessary. If "fair-market rental" or some other reasoned criterion were to become the basis for valuing properties owned by State and local governments, the sale-leaseback strategy probably would have difficulty surviving on its other merits.

V. Cost Allocation: An Often Overlooked Maximization Technique

Cost allocation is a "mystified" subject to social welfare professionals. That is, it is understood that cost allocation is something very necessary—but beyond this, very little is known. More should be understood since, within complex human services organizations, budget decisions tend to drive program decisions (regrettably, since it should be the other way around), and the outcome of the cost allocation is a major factor in budget decisions.

Therefore, it should be useful to remove some of the mystery that surrounds the process and show how an understanding of the process can be a very powerful organizational analysis and planning tool in human services organizations, and how it can serve program purposes. Cost allocation has a number of potential and actual uses in an organization:

- Pricing the services of the organization.
- Maximizing revenue flows to the organization.
- Developing annual and long-term budgets.
- Providing management controls.

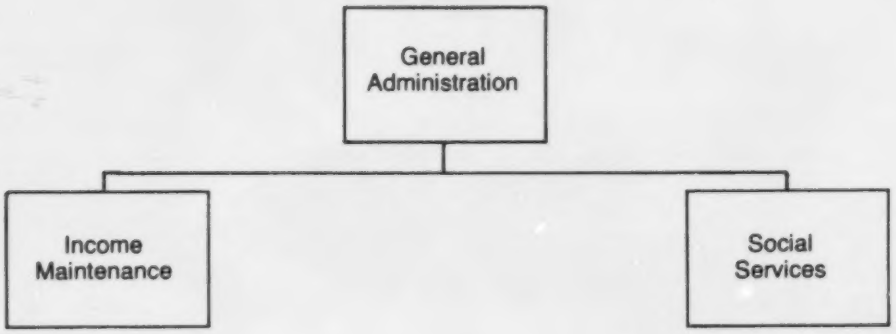
Currently, in most human services organizations, these objectives are only potential, not actual, since the process is used mainly—in a most unreflective way—merely to price the services of the organization.

Why Cost Allocation Is Important: A Small Simulation

Whether an organization is governmental, private nonprofit, or for profit, its function generally should be to "buy low and sell high" (or at least not sell its products or services at less than cost)—not the other way around. In an organization that has only one product or service, and little or no division of labor, cost allocation procedures are not needed. They are needed in all others.

In any but the smallest "one-celled" organizations, there will be an administrative division (more than one in larger organizations) and two or more divisions that produce the products or services of the organization. A public welfare agency, for example, may serve two functions—income maintenance and social service—and the two functions may be organized so that each is the responsibility of a separate division. Supervising those two divisions will be an administrative division that includes the director of the agency, the administrative and general office staff, and all of the agency's overhead accounts (see figure 3).

Figure 3
A Simple Public Welfare Agency Organization Chart



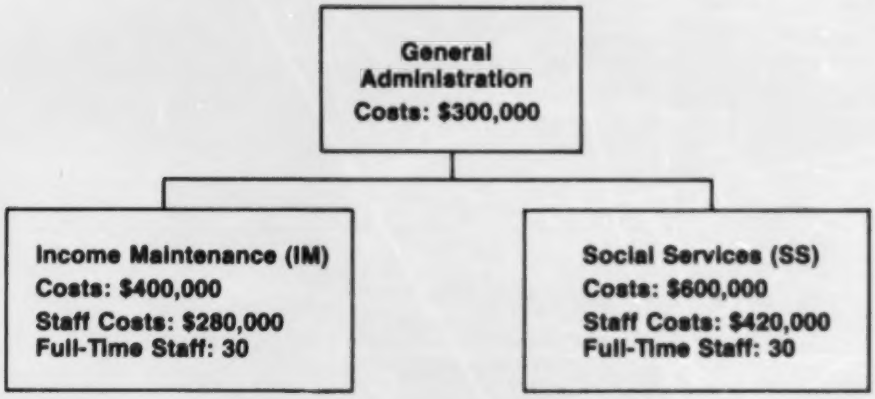
The income maintenance and social services divisions are the "line" divisions or "product" divisions, and each incur costs in producing its products (or, in our example, providing its services). The administrative division also incurs costs in its operations. Part of the costs of the administrative division will be all staff fringe benefits, rent, utilities, supplies, and all of the other costs that cannot be assigned directly to the two line divisions.

The agency can "charge" its clients or one or more levels of government for the cost of producing its products in much the same way that a private, for-profit company charges its customers for its products; the major difference here is that cost and price are supposed to be equal in governmental and nonprofit producers, while for-profit producers add on something for profit. If the agency's prices reflect only the operating costs of the line division producing the product, then there will be an operating loss, since the true cost of producing the product also includes some portion of the operating costs of the administrative division. Therefore, some method is needed to decide how much of the administrative costs should go to each division. This method is cost allocation.

The process of cost allocation can be illustrated by continuing our example of the public welfare agency. Suppose that $300,000 is spent on general administration, general office staff, and other overload; $400,000 is spent on salaries ($280,000) for 30 full-time income maintenance staff and other costs ($120,000) charged directly to the income maintenance division; and $600,000 is spent on salaries ($420,000) for the same number of full-time social services staff and other costs ($180,000) charged directly to the social services division. The $300,000 must be included in the costs of the two line divisions of the welfare agency so that the agency can properly file for Federal and State reimbursement. The problem is to allocate the $300,000 using some reasonable basis for allocation. The two most commonly used bases are staff salaries and number of employees. In other words, we can assume that the time and effort (and, hence, the costs) were expended to the two divisions in proportion to the total salaries in each division or in proportion to the total number of employees in each division. Figure 4 illustrates the use of the two cost bases in cost allocation.

As is clear from figure 4, the two methods produce a difference of $30,000, which is allocated into each division. If we use the total salaries of the income maintenance division, with its lower salaried staff, we have a final cost that is $30,000 *less* than if a simple "body count" were used to allocate the administrative costs downward.

Figure 4
Cost Allocation Using Two Different Allocation Bases



Alternative 1: Use Staff Salaries as Allocation Basis.

IM Staff Salaries:	$280,000	(40% of Total)
SS Staff Salaries:	420,000	(60% of Total)
Total Staff Salaries:	$700,000	
IM Division Costs:	$400,000	
Allocated Costs:	120,000	(40% of Administrative Costs)
Total Costs:	$520,000	
SS Division Costs:	$600,000	
Allocated Costs:	180,000	(60% of Administrative Costs)
Total Costs:	$780,000	

Alternative 2: Use Number of Full-Time Staff as Allocation Basis.

IM Full-Time Staff:	30	(50% of Total)
SS Full-Time Staff:	30	(50% of Total)
Total Staff:	60	
IM Division Costs:	$400,000	
Allocated Costs:	150,000	(50% of Administrative Costs)
Total Costs:	$550,000	
SS Division Costs:	$600,000	
Allocated Costs:	150,000	(50% of Administrative Costs)
Total Costs:	$750,000	

This makes a difference not only in the unit price of services for each division; it also can make a difference in Federal-State cost shares for administering the two divisions and the total agency.

Suppose, for example, we use the two different bases for allocation — relative salaries and staff count — in two agencies which differ only in one respect — the first agency has not spent its total social services allocation and thus has, for the moment, an open end in both income maintenance and social services. (An open-ended account is one in which the specific rules of participation are set, such as in AFDC or medicaid, but there is no spending cap. Thus, the Federal Government is obligated to pay reimbursements for as many persons as apply for benefits and are eligible.)

In the second agency, only income maintenance is open ended, in that social services matching by the Federal Government ceases at 75 percent of $600,000 (that is, the Federal Government reimburses up to a maximum of $450,000). Any further dollars in that department must be paid by the State.

From the point of view of Federal revenue maximization, the results are clear (as shown in table 15).

- If all accounts for an agency are open ended, we would prefer to use total salaries as an allocation basis.
- If all income maintenance accounts are open ended, but the social services accounts are closed ended, we would prefer to use total personnel as an allocation basis.

Table 15
Reimbursement Effects* of the Use of Two Different Allocation Bases, Coupled With Two Federal Reimbursement Conditions

	Agency 1:	*Agency 2:*
	All Accounts for Both Divisions (IM and SS) Open-Ended (No Spending Cap)	*All Accounts for IM Open-Ended but Closed-Ended for SS*
Alternative 1	Federal: $845,000 State: $455,000	Federal: $710,000 State: $590,000
Alternative 2	Federal: $837,500 State: $462,500	Federal: $725,000 State: $575,000

* **IM** = 50 percent Federal Reimbursement (open-ended in both agencies).
SS = 75 percent Federal Reimbursement (open-ended in Agency 1 but closed-ended and available only for the first $600,000 of social services costs in Agency 2).

At this point, having looked at the fiscal effects of using two different allocation bases within an organizational model under two different conditions of Federal reimbursement, we have completed a very small simulation in cost allocation. There has been something sacrificed in the interest of simplicity, however. We would like to have a somewhat more "realistic" organization; we would like to have more detail; and we would like to understand what the various policy and organizational options are so that we can start understanding what happens when we use them in different combinations.

The Four Basic Elements of the Cost Allocation Process

To understand the elements of an organization from a fiscal management point of view, we can achieve more by looking at the four basic elements of the cost allocation process:

- The organizational or pooling problem.
- The item allocation problem.
- The allocation basis problem.
- The mathematical structure problem.

It should be noted here that each of these elements of cost allocation functions as an indicator of the flexibility, or room to maneuver, given to us by the cost allocation process. That is, it is sometimes felt by those not professionally immersed in this arcane lore that such accounting techniques are very restrictive and precise in their usage and outcome. Part of the understanding that has come from computer-aided simulation in this area is the exact opposite. An understanding of the "generally accepted principles of accounting" in this area should convey a tremendous feeling of freedom in dealing with one's own agency's fiscal management. A closer examination of each of these elements will show why this is true.

The Organizational or Pooling Problem

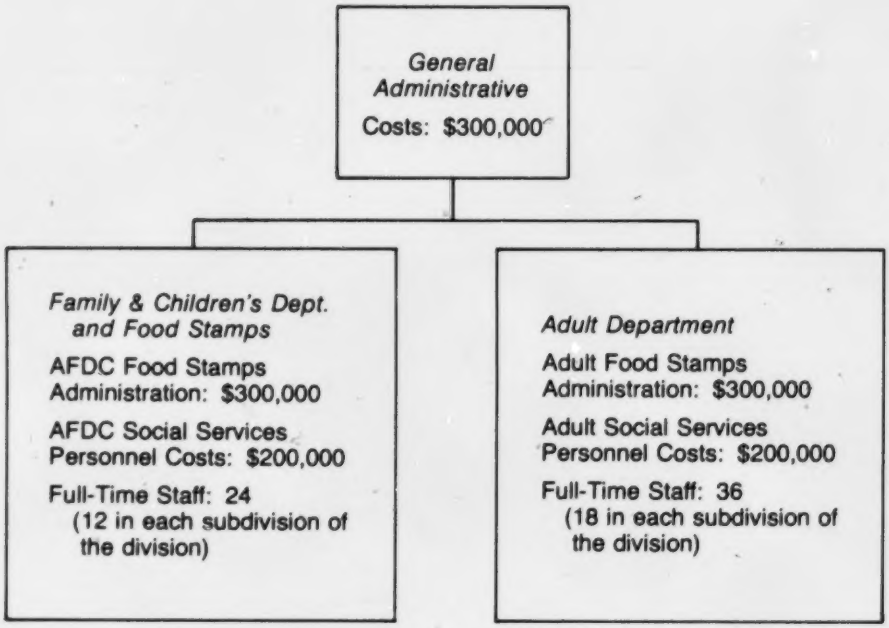
How cost allocation in the agency is carried out relates to the very heart of the agency — its organization. That is, how we aggregate costs tends to follow the organization chart. We have considered the two-division public welfare agency, in which there was an income maintenance division and social services division. We could, however, have adopted a different organizational model. An example:

> We could have a family and children's division and an adult division, each of which would have income maintenance programs and service programs. We would now have a combination of open-ended and (perhaps) closed-ended programs in each division, with both 50 percent and 75 percent reimburseable programs in each. Thus, the previous "functional" (income maintenance and social services) organizational principle becomes a function of client age as well. There are other dimensions we could add to our organizational model. For example, we could organize the adult division around those cases considered employable and those cases considered so chronically and severely handicapped as to not have significant likelihood of employment. And we need not be limited by two divisions. We could have more of them.

Thus, the organizational procedure (or pooling procedure deciding what programs and thus what programmatic elements of cost to put into each division of the agency) will clearly influence how the costs from the administrative division will be allocated downward into the line divisions.

How the differences in organization will influence reimbursement is illustrated in figure 5 below. Here we present the same agency, but with a different programmatic organization. There are now income maintenance items in each division, along with social services items. In this case, the adult division staff are paid less than the family and children's division staff. The 50 percent Federal matching for all income maintenance (open-ended) programs is the same, as is the 75 percent Federal matching for all open-ended services; and there is 75 percent Federal matching up to $600,000 ($300,000 in each division) when there is a closed end for services.

Figure 5
Administrative Costs and Their Allocation for a Public Agency: A Programmatically Organized Agency


General Administrative
Costs: $300,000
Family & Children's Dept. and Food Stamps
AFDC Food Stamps Administration: $300,000
AFDC Social Services Personnel Costs: $200,000
Full-Time Staff: 24 (12 in each subdivision of the division)
Adult Department
Adult Food Stamps Administration: $300,000
Adult Social Services Personnel Costs: $200,000
Full-Time Staff: 36 (18 in each subdivision of the division)

The reimbursement effects of the change in organizational principle can be evaluated in combination with the effects of having total open-ended or closed-ended financing for social services and of using either staff counts or staff salaries as an allocation basis. The results are displayed in table 16.

Table 16
Reimbursement Effects of the Use of Two Different Allocation Base Alternatives, Coupled With Two Federal Reimbursement Conditions and Two Forms of Agency Organization

		All Accounts for Both Divisions Open Ended	All Accounts for Income Maintenance Both Divisions Open Ended; Social Services Closed Ended
Functionally Organized Agency: (Agency 1)	Allocation-Basis Alternative 1	Federal: $845,000 State: $455,000	Federal: $710,000 State: $590,000
	Allocation-Basis Alternative 2	Federal: $837,500 State: $462,500	Federal: $725,000 State: $575,000
Programmatically Organized Agency: (Agency 2)	Allocation-Basis Alternative 1	Federal: $865,000 State: $435,000	Federal: $725,000 State: $575,000
	Allocation-Basis Alternative 2	Federal: $837,500 State: $462,500	Federal: $725,000 State: $575,000

While more than reimbursement factors are important in deciding on matters of agency organization, it is clear from the results of carrying our example thus far that reimbursement factors may be used as one criterion for organization. Here, for example, we can see that if all accounts are open ended (as in the agency used in this example), then a programmatically organized agency using a salary basis for administrative cost allocation is slightly preferable on Federal reimbursement grounds to the other combinations of organization and allocation bases. If, on the other hand, the services are closed ended, then any of three approaches to allocation and organization is adequate, since all return the same amount of reimbursement.

It might be noted that the size of the differences is a function of the structure and size of the organization used for the example. In a number of real-world applications, the differences between the alternatives tend to be much larger.

So far, we have looked at one basic "reality condition" (i.e., whether all accounts are open ended or not) and two "policy conditions." Policy conditions are variables consisting of those things we can change on our own — the allocation basis to be used and the organizational or pooling basis to be used in allocation — that will make a difference in the final cost distribution and the reimbursement amounts to be claimed.

The Item Allocation Problem

The next important problem is that of item allocation. To understand it, note that cost allocation is really a two-stage process. The first stage is developing the basic budget in each division of the organization and deciding what goes into it. That process is usually not considered a part of the cost allocation process. However, it is key to cost allocation because items may be defined as indirect costs or direct costs in the basic budget that exists prior to the cost allocation process. Sometimes these items are clearly in one area or another. For example, the salary of an AFDC eligibility technician *must* go into the income maintenance division and *not* be considered general overhead. On the other hand, the salary of the administrative assistant to the general director (who has responsibility for all aspects of agency operation) *must* go to the operating cost of the administrative and general accounts to be allocated.

Sometimes it is unclear where an item might go. Suppose, for example, the director's office has an office of personnel. If the tasks of the personnel office were not distinctly segmented between persons and work done for each of the two production departments, the entire office would be included in the administrative division, to be allocated out—along with all other costs of administration—according to the allocation methods discussed earlier. On the other hand, the personnel office might be split neatly into two parts, one working on the personnel problems and needs of one production division, the other working on the personnel problems and needs of the other division. In this case, all but the actual overall direction of that office might be included in their corresponding production divisions as overhead internal to those production divisions. There is, in the Federal management circulars involved here (see, for example, Volume 45 of the Code of Federal Regulations, Paragraph 74 and related appendices for such rules), a large set of decision rules for the discretionary placement of items.

The Allocation Basis Problem

In our example of cost allocation that began this section, we examined what would happen in the cost allocation process if we allocated administrative costs to the production divisions according to two different methods—first using relative percentage of salaries in each production division as an expression of the relative administrative effort required from the administrative division for each of the production divisions, and then using the relative percentage of personnel in each production division. Since average salaries were different for the two production divisions, the allocation results were also different.

In the language of cost allocation, the criteria for allocation of costs "downward" into the two production divisions are called *allocation bases*.

To see the problem more generally, consider an organization that has several overhead divisions and multiple operating (i.e., production or line) divisions. Now, instead of a fairly simple choice of allocation bases, we must make choices among the available bases in each division (overhead or production) that provides services to any other division.

Of course, we could measure the activity of every overhead division using a measuring device that tagged all work done in each division, but in many organizations this kind of "job ticketing" would be onerous and expensive. Therefore, we tend to choose simplified ways of measurement to achieve an equitable allocation of one division's effort to another. To simplify, we generally use "allocation bases," or measures which are proxies for whatever it is we are really trying to measure. Thus, a personnel division might measure its relative effort for each of the line divisions by counting the number of hires, fires, and quits processed for each of them. Each line division's allocated share of the cost of the personnel division is then obtained by multiplying the total cost of the personnel division by the proportion of effort (i.e., the proportion of hires, fires, and quits) expended in behalf of that division.

Each division whose costs are to be allocated to the line divisions will have measures which are more or less customary. Tables of common measures are issued by Federal agencies responsible for approving cost allocation plans and can be found in the literature of the field. Our analysis of 5 major sources yielded a listing of nearly 60 separate overhead divisions that can be found in the various health and welfare agencies. Many of these divisions have two or more "customary" allocation bases. Some examples are presented in figure 6.

Figure 6
Alternative Allocation Bases Used in Various Human Service Agency Overhead Divisions
(Some Examples From Cost Allocation Literature)

Overhead Department	*Suggested Alternative Allocation Bases*
Accounts	Number of Transactions Processed Total Direct Costs Salaries and Wages Payroll
Telephone and Communications	Number of Telephone Instruments Number of Employees
Fair Hearings	Case Count Weighted Case Count Time Distribution
Housekeeping	Hours of Service Square Footage Occupied by Division
Motor Pool	Miles Driven Days of Usage
Service Records	Estimated Time Spent on Records Number of Days of Service Number of Cases Served

Since there may be many overhead divisions in large agencies, and since there may be alternative bases for each such division, the number of possible combinations of allocation bases in a large organization will be the result of multiplying each overhead division's number of alternative bases times those of all other overhead divisions. In an organization that had only those overhead divisions listed in figure 6, the total number of different allocation-basis combinations would be $4 \times 2 \times 3 \times 2 \times 2 \times 3 \times 288$.

Just as the two bases used in the simulation presented earlier resulted in a low and a high amount of Federal reimbursement, so also would a simulation that went through all combinations of allocation bases in an organization. The calculation of the effect of all competing combinations obviously would be inefficient and probably unproductive if manual methods only were used. However, if the alternative allocation bases for each division were developed, and we had our cost allocation plan programmed for a computer, we could then simply try out, on a brute force basis, *all* combinations of cost allocation bases, then select that combination that provided the agency with the greatest reimbursement.

Then, the question arises: What would a computer model of an organization look like, so that such examinations of the organization could be carried out regularly? This brings us to the fourth critical dimension of organizational plasticity — mathematical structure.

The Mathematical Structure Problem

Of the four elements allowing for flexibility in cost allocation plans, it is not clear which has the most power. However, in our own simulations of the use of various calculation methods for cost allocation, it is clear that the mathematical structure chosen for the calculations has a significant effect on the distribution of money from overhead to production divisions, even without considering the use of the combined effects of pooling, item allocation, and allocation-basis changes, either alone or simultaneously. From the point of view of our underlying mathematical model (a general linear equations model), all the well-known forms of cost allocation—direct, stepdown, double apportionment, and the algebraic method (as practiced by most accountants) — can be shown to be simpler cases of the more general multiple linear equations model. [Note: This result was demonstrated by Robert Sherman, Ph.D., in his mathematical developments for the Humphrey Institute cost allocation model, COAL-1.]The essential difference between the models lies in the amount of the total internal-effort distribution information used. The direct allocation model, which is most popular in the social services field, uses the least information, the stepdown model (most popular in the hospital field) uses the next least, on up to the general linear equations model, which uses all the information. It should be noted that the well-known cost allocation models are only a few particles along the entire information-use spectrum.

There are, in principle, an extremely large number of conceivable cost allocation models between the simplest form of direct allocation and the most sophisticated form of a simultaneous linear equations model. Indeed, our own general model is somewhat restrictive, since it allows only for assumptions of linearity rather than curvilinearity; however, as the investigations of the econometricians show, large models, with much curvilinearity built in, are still somewhat beyond our ability to work with easily.

Cost allocation calculations, while they may appear complex to the beginner, are fairly simple processes and would reward some concentration in attempting to understand them. Knowledge of cost allocation can pay tremendous dividends in financing one's own operation, in understanding how others are financing theirs, and in understanding in an extended-reasoning and rather profound way how changes in any aspect of the organization's operations affect all other aspects.

The basic elements of cost allocation calculations are:

- An internal effort distribution. This is defined as the total interdepartmental service distribution by the use of allocation bases (salaries, number of employees, square footage, or whichever other bases are logically appropriate). Costs are allocated to production centers in proportion to the relative amount of the allocation basis used by each of the production centers. The concept is explained below and an internal effort distribution (the proportional share of interdepartmental services provided by each cost center to itself and all others) is illustrated by example.
- Direct expenses. These are the beginning amounts that are booked to each cost center according to its direct use of people, equipment, space, etc. Prior to the allocation procedure, each cost center, whether a support center or a revenue center, starts out with a direct expense amount. A distribution of such expenses is given below for a social services agency with eight cost centers—$300,000 of direct expense to its four support centers and $700,000 of direct expense to its four revenue centers.
- Units of service. For pricing purposes, once a social service agency has completed its cost allocation calculations, the units of service are divided into the final cost of each revenue center to derive a unit cost for its services.
- An organizational chart or other schema that relates departmental organization, lines of authority and accountability, and support and revenue centers.

When undertaking the task of cost allocation, *we need know only these four kinds of information and the characteristics of the method of calculation (with respect to how it uses effort-distribution information) to be able to perform the calculations required in cost allocation.*

Having said that the process is fairly simple, we should note that the agency's chart of accounts and recording systems that generate the direct expenses, as well as the various measures used to generate the internal effort distribution and the mechanics of recording units of service, can be extremely detailed and complex. Nevertheless, the reader should have no fear of attempting an understanding of the basic *logic* of the process.

An extended introduction to, and step-by-step discussion of, mathematical models — especially designed for those who have minimal mathematical sophistication — appears in the authors' *Manual 4093* (Copeland and Iversen, 1978).

Afterword

This essay was written in a pre-Deluge spirit, before the budget proposals of the Reagan administration. The basic approach might be thought of as more suited to the spirit of the Carter administration. The important question now: Are the suggested principles usable in what is now a completely different political and fiscal environment?

The environment has changed in a number of ways. Where we had assumed that there would be a continuing open-ended medicaid account, we now must assume some form of "floating cap," possibly related to inflation and to growth in the underlying population at-risk. Where we had assumed a continued congressional and administrative devotion to the use of fiscal and regulatory incentives as a way of influencing the behavior of State governments, providers, and consumers, we must now recognize that doctrine to be no longer valid. It has been sacrificed to a doctrine of "flexibility."

What this means practically is that the social services-oriented accounts (title XX, developmental disabilities, maternal and child health, NIMH programs) will be cut drastically. For example, the proposed 33 percent cut from Federal Fiscal Year (FFY) 1981 to 1982 will, with the addition of 12 percent inflation, result in a nearly 50 percent cut (in real terms) in funding for the social services in 1 year. Because the social services accounts have been the key Federal supports of community-oriented services for the developmentally disabled and the mentally ill, with title XX, for example, contributing about $500 million per year for community services for the developmentally disabled and $350 million per year for community services for the mentally ill, this will mean roughly a $375 million cutback in Federal support in these areas in FFY 1982.

Major portions of these cutbacks could be repaired, using medicaid funding, if such funding was to remain open ended. However, the administration, which has shown formidable strength so far in both the House and Senate, has proposed a "floating cap" for medicaid. The cap itself would work as follows: FFY 1982 medicaid funding from the Federal Government would equal 105 percent of FFY 1981 funding (or an official early estimate of that funding); FFY 1983 funding would equal FFY 1982 funding, plus an amount equal to the "gross national product deflator" (probably for the previous four quarters); and funding in future years would work the same way as in 1983. If the proposed cap is voted through by Congress, then the loss to the States from *both* social services and medicaid cutbacks (in current dollars) would be about $28 billion over the 1982 through 1985 budget years (assuming 10 percent general inflation per year for those years). What the States would get in exchange would be enhanced "flexibility" in spending the money.

The increased flexibility in social services would not be worth much since such funds are already programmatically quite flexible and since some of the major program restrictions in title XX have also been written into the social services block grant. Some, but not all, of the accountability rules under title XX would also be deleted—but their deletion would not mean much in cost savings since most States already have adjusted to them (e.g., the "fifty percent rule" under title XX) for some years.

It is not yet clear what the approach to increased flexibility will be under medicaid. There apparently are two positions being discussed within the administration. The first approach is essentially to leave the entire medicaid program as it is for the moment, with structural reform coming later, and to provide a broad waiver authority somewhat like the Social Security Act's Section 1115 waiver authority (but without the research and demonstration components) to the Secretary. States could then come in with their own plans for running a medicaid program. The second approach is to leave the "basic seven" services (i.e., hospital, physician, etc.) as they are now, but only for the categorically eligible

populations, and to allow the States an almost total flexibility for the remainder of their programs—whether basic services for the mentally needy or other services for any medicaid-eligible group.

The flexibility of medicaid, in whatever form it came, would be worth something to the States. This is especially true in continuum-of-care financing for the long-term care of the mentally ill, the developmentally disabled, and child welfare populations. It is probably true in continuum-of-care financing for the long-term care of the aged as well, but research is needed to clear up points about whether creating new kinds of supply (e.g., more normalized residential, home care, and support programs) will create an additional demand for services beyond merely substituting for current higher cost services.

Accelerated deinstitutionalization of the mentally retarded and developmentally disabled and the simultaneous development of community programs according to a continuum-of-care plan will continue to be *strongly* desirable fiscally for a State, whether the proposed cuts come or not.

That is:

- If there are no social services and medicaid cuts, there is potential for large initial net savings to States and later savings to the Federal Government from a fast-track deinstitutionalization plan (when compared to historic trends in deinstitutionalization in the States).
- Large savings are still available if there are cuts in social services but not in medicaid—so long as the State carries out a fast-track deinstitutionalization plan.
- Savings are no longer available at all in most States, or they are quite small in the early years, if the States commit to a fast-track deinstitutionalization plan in the face of cuts in *both* social services and medicaid.

Even if both accounts are cut, there are still strong fiscal incentives for the States. The major fiscal incentive is a gloomier one to be sure—since we would move from *an incentive to maximize Federal funding to an incentive to minimize State net losses*. For example, one large Northeastern State spent $504 million in State funds (expressed in 1985 dollars and not counting Federal dollars) on its publicly supported MR/DD system (over the whole continuum-of-care) in 1980. If it succeeded in moving about 55 percent of its 1980 institutional population into community programs by 1985, its 1985 net State costs for the whole system would drop to $450 million—*even with the proposed social services and medicaid cuts*. If, however, it "froze" the 1980 distribution of patients (i.e., the same numbers of patients in State institutions, nursing homes, community residences, etc. in 1985 as in 1980), the net State cost for 1985 for running the system would be about $580 million. This would not only be a large (15 percent) increase from the current level of State-dollar spending, it would be a very large increase (about $130 million per year by 1985) over the net State cost that would result from fast-track deinstitutionalization with continuum-of-care planning. We have similar results for four more of the six States in which we have examined the question. In the sixth, there is now virtually no institution system in the State at the present time (and, of course, far fewer savings accruing to a deinstitutionalization strategy).

Using continuum-of-care financing principles is thus extremely important for the States. For, if they fall into the traditional fragmented funding approaches of the past, then any "designed-in" strategic approach to cost control and cost containment falls victim to the "clash of interests" strategy—where hospital associations, nurses, psychologists, social workers, therapists of all kinds, and advocacy groups, press their individual claims on Governors, legislatures, and bureaucracies. The results are eventually fiscally and programmatically disastrous since:

> the changes tend to be marginal, their wider effects unexamined, and their relationship to any general plan nil. Yet such changes, as more and more of them come along, tend to define a new...policy for the state—one which grows as if guided by an invisible hand. Unfortunately, such invisible hands do not have the rationality that is vested in the historic invisible hand of classical economics, which (in theory) guides everything for the maximization of the economic welfare. Rather, the strategy

> of independent, incremental change provides each contradictory interest, in turn, an opportunity to get its piece of the program quietly installed. The contradictions of the public political scene are thus installed in the relatively non-public fiscal and bureaucratic operations of the human services system. The strategy, if pursued extensively (without periodic purging), tends to produce a system that becomes immobilized in its own contradictions. [Note: W.C. Copeland and I.A. Iversen, The Deinstitutionalization Problem, part of DD Project of National Significance funding proposal, 1978.]

What we argue here is not for or against the proposed cuts. What we do argue is that, if there are *no* cuts, fast-track deinstitutionalization with continuum-of-care planning and financing will continue to be pleasant for States. If there *are* such cuts, then the same strategy is necessary to avoid intense fiscal pain.

The proposed cuts provide more of an "open universe" for the States for dealing with their long-term care systems. However, they do not provide any indication of strategic direction, program structure, fiscal incentives, information requirements for planning and operation, or, most importantly, a set of principles for allocation of the reduced but more flexible funding.

What the cuts do is to put the onus on each individual State to plan its systems of care rationally. What we do in this essay is provide a set of design principles that can give a State a coherent rhetoric for planning and financing its systems of care under the new order.

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